


CITY OF  YORK.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1903.

YORK:
PRINTED BY THE "YORKSHIRE GAZETTE" LIMITED, 15, HIGH OUSEGATE,
1904.

CITY OF YORK.

—O—

THE HEALTH COMMITTEE.

NOVEMBER, 1902, TO NOVEMBER, 1903.

Alderman Border, *Chairman*.

The Right Honourable the Lord Mayor (Ald. E. Gray), *Vice-Chairman*.

Counr. Pearson.

„ Walker.

„ Fowler Jones.

„ Robinson.

„ Blakey.

„ T. Carter.

„ Lund.

„ Hibbett.

Counr. Dashwood Carter.

„ Moss.

„ Anderson.

„ J. Birch.

„ Sampson.

„ Wray.

„ Mawson.

THE FEVER HOSPITAL SUB-COMMITTEE.

NOVEMBER, 1902, TO NOVEMBER, 1903.

The Chairman.

Counr. Walker.

„ Hibbett.

„ Dashwood Carter.

„ Fowler Jones.

„ Robinson.

Counr. T. Carter.

„ Lund.

„ Moss.

„ Anderson.

„ Sampson.

„ Wray.

PUBLIC BATHS SUB-COMMITTEE.

NOVEMBER, 1902, TO NOVEMBER, 1903.

The Chairman.

Vice-Chairman.

Counr. Walker.

„ F. Jones.

„ Robinson.

„ Blakey.

Counr. Pearson.

„ Anderson.

„ J. Birch.

„ Wray.

„ Sampson.

„ Mawson.

STAFF OF THE HEALTH DEPARTMENT.

Medical Officer of Health—

Edmund M. Smith, M.D., C.M., Edin., D.P.H., Camb.

Inspector of Nuisances—Jonathan Atkinson.

Ditto. (from November, 1903), A. E. Drummond, Cert. San. Inst.

Assistant Inspectors of Nuisances :—

(To November, 1903)	*A. E. Drummond	} Certif., Sanitary Institute
	E. Ridsdale	
(To May, 1903)	{ A. W. Grace	
	{ W. D. Swinney	
(From June, 1903)	{ *J. C. Dawes	
	{ *J. A. Shillito	

Disinfecting Assistant— A. Longstaff.

Senior Clerk— E. Richardson.

Junior Clerk— H. Hornsey.

* These also now hold the Meat Inspector's Certificate of the Sanitary Institute.

Matron of Fever Hospital—Miss Haspell.

Public Analyst—J. Baynes, F.I.C.

Meat and Cattle Inspector—W. Fawdington, M.R.C.V.S.

Canal Boats Inspector—Thomas Leetham.

Town Clerk—Mr. R. Percy Dale.

THE HEALTH OFFICE,
 GUILDHALL,
 YORK, AUGUST, 1904.

*To the Right Hon. the Lord Mayor, the Aldermen and Councillors of the
 City of York.*

MY LORD MAYOR AND GENTLEMEN,

I have the honour to present my Annual Report on the Health and Sanitary Conditions of the City and on the work of the Health Department during the year 1903. This constitutes my sixth Annual Report. I must apologise for the delay in its publication, unavoidable owing to my illness last winter.

I have endeavoured to make it a fairly complete record of the work of the Department, and of all matters bearing upon the health of the citizens, during a year rendered especially arduous and anxious by the repeated invasions of Small-pox, which considerably hindered the ordinary work of the Department, already sufficient to tax the efforts of the staff to the utmost.

The vital statistics have been made much more complete than before, and will be found valuable for reference and for guidance in future work.

I desire to thank you all for much kindness received during the year, and particularly during my long illness.

My thanks are specially due to the Chairman of the Health Committee for much advice and support, to the Deputy Medical Officer of Health, Dr. Goode, for his help on various occasions before and during my illness, to my colleagues in office and in my profession, to the Teachers of the Schools and others for their kind co-operation, to the members of my staff for diligent endeavour in working in accord with my aims and wishes.

I am, my Lord Mayor, and Gentlemen,

Yours obediently,

EDMUND M. SMITH,
Medical Officer of Health.

CITY OF YORK.

STATISTICAL SUMMARY FOR 1903.

Area in acres, County Borough of York, 3,730.

Number of inhabited houses, Census 1901, 16,550.

Population, Census 1901, 77,914.

Do. Estimated to middle of 1903, 80,186.

Proportion of persons per acre, 21·5.

„ „ per house, 4·70.

Birth-rate, 29·1 per 1,000 living.

Nett general death-rate, 16·2 per 1,000 living.

Infantile mortality, 153 per 1,000 births.

Mortality of children under the age of 5, 6·8 per 1,000 living at all ages.

Zymotic mortality,	1·94	„	„	
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Diarrhœa death-rate,	0·56	„	„	
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(In 1901, 1·34 ; 1900, 2·0).

Death-rate of Bronchitis and Pneumonia	2·54	„	„	
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Phthisis death-rate,	1·22	„	„	
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Cancer death-rate,	0·84	„	„	
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ANNUAL REPORT, 1903.

POPULATION.

The population of the City at the end of June, 1903, estimated according to the Registrar-General's method (based upon the rate of increase during the previous decade, 1891-1901, as revealed by the Census of 1901) was 80,186 as compared with 79,114 for 1902, an increase of 1,072. The birth-rate and death-rates in this Report are calculated upon that figure.

The natural increase of population,—*i.e.*, the preponderance of births over deaths—in 1903 was 1,033 as compared with 1,124 for 1902, and 1,067 for 1901.

The proportion of persons per acre is 21.5 and per house 4.7.

The estimated populations of the City portions of the Registration Sub-Districts at the middle of the year 1903, are as follows:—

Bootham District	...	...	...	22,230
Micklegate „	...	...	...	26,568
Walmgate „	...	...	...	31,388

The River Ouse divides the Micklegate District from Bootham and Walmgate Districts. The River Foss would most naturally divide the two latter districts, but, through circumstances connected with the old parochial system, Walmgate District comprises Hungate District, a large part of the Groves, and of Huntington Road, so that it is much the largest area of the three. It also contains the largest congested areas and the largest poor-quarters of the City. So that figures concerning this district can only be properly compared with those of the other two districts as percentages, or as rates per 1,000, of the population.

TABLE A. CITY OF YORK.

YEAR.	A. Population as estimated by Registrar-General's method (<i>i.e.</i> , according to rate of increase during decade 1881-1891).	B. Population as estimated according to mere preponderance of Births over Deaths Year by Year (Natural Increase).	C. Population as estimated according to Annual rate of increase between 1891 and 1901, as revealed by Census of 1901.	E. Revised Birth-rate, based upon figures in Column C.	G. Revised Death-rate, based upon the figures in Column C.
1891 (Census)	67,004	67,004	67,004	30.0	23.8
1892	67,807	67,422	67,807	31.9	20.9
1893	69,388	69,086	69,388	29.0	19.9
1894	70,053	69,715	70,392	30.8	17.4
1895	70,723	70,661	71,396	31.0	19.2
1896	71,400	71,507	72,500	30.4	17.8
1897	72,083	72,421	73,604	30.8	18.4
1898	72,774	73,332	74,708	30.0	18.5
1899	73,474	74,189	75,812	30.3	16.6
1900	74,177	75,225	76,916	29.3	20.3
1901 (Census)	77,914	76,292	78,044	30.2	16.5
1902	—	77,416	79,114	29.5	15.3
1903	—	79,755	80,186	29.1	16.2

Average Birth-rate during ten years 1894-1903 inclusive = 30.1.
Average Death-rate ditto = 17.6.

Births.

The total number of births notified to me by the Sub-Registrars during the 52 weeks ending Saturday, January 2nd, 1904, was 2,337.

The total number of births registered in 1902 was 2,339.

The birth-rate in 1903 was 29·1 per thousand living, as compared with 29·5 for 1902.

The average birth-rate for the 76 Great Towns for 1903 was 29·7.

The average York birth-rate for the ten years, 1894—1903, was 30·1, and would appear to be slowly declining.

The births in 1903 occurred as follows :—

	Whole City.	Bootham District.	Micklegate District.	Walmgate District.
First quarter of year	593	135	200	258
Second „ „	582	134	189	259
Third „ „	592	131	205	256
Fourth „ „	570	143	177	250
	<hr/> 2,337 <hr/>	<hr/> 543 <hr/>	<hr/> 771 <hr/>	<hr/> 1,023 <hr/>
Males	1,208			
Females	1,129			
	<hr/> 2,337 <hr/>			

The total number of illegitimate children born in 1903 was 81 (3·4 per cent. of total births).

The birth-rates for the three Registration Sub-Districts, calculated upon the estimated populations of those districts, were as follows :—

Whole City.	Bootham District	...	...	24·4
—	Micklegate do.	...	...	29·0
29·1	Walmgate do.	...	...	32·5

Infantile Vaccination :—

The total number of children successfully vaccinated in 1902 was 2,005; vaccination was postponed in 13 cases; 7 children were declared insusceptible; and there were 41 “conscientious objectors.” The figures for 1903 are not yet available. During 1903, 340 persons were re-vaccinated by the Public Vaccinator.

Deaths.

The gross total number of deaths registered within the City of York during the 52 weeks ending January 2nd, 1904, was 1,339, giving a death-rate of nearly 16·7 per thousand living.

If the deaths of 53 persons not belonging to the City ("Non-residents") be deducted, and those of 18 citizens ("Residents") who died outside the City be added, **the nett total number of deaths was 1304, giving a nett death-rate of 16·2 per thousand living.**

The average death-rate for the 76 Great Towns in 1903 was 16·3.

Comparison of the figures for York with previous years :—

		Total number of deaths registered.		Gross death-rate.		Nett number of deaths (<i>i.e.</i> , after deduction of deaths of non-residents, &c.)		Nett death-rate.
1897	...	1,392	...	19·3	...	1,358	...	18·4
1898	...	1,407	...	19·3	...	1,386	...	18·5
1899	...	1,308	...	17·8	...	1,265	...	16·6
1900	...	1,613	...	21·1	...	1,568	...	20·3
1901	..	1,331	...	17·0	...	1,294	...	16·5
1902	...	1,257	...	15·8	...	1,215	...	15·3
1903	...	1,339	...	16·7	...	1,304	...	16·2

The increase in nett total of deaths in 1903, as compared with 1902, was 89.

The deaths were registered during the four quarters of the year as follows :—

		Whole City.	Bootham District.	Micklegate District.	Walmgate District.
First quarter	...	292	86	86	120
Second ,,	...	271	62	97	112
Third ,,	...	283	62	94	127
Fourth ,,	...	458	93	105	260
		<hr/> 1,304 <hr/>	<hr/> 303 <hr/>	<hr/> 382 <hr/>	<hr/> 619 <hr/>

N.B.—All the figures relating to deaths for 1903 cover the year ending January 2nd, 1904.

It will be observed that more than a third of the total deaths occurred in the fourth quarter of the year (October to January), and that 56½ per cent of these were in Walmgate District.

The deaths of males numbered 667; of females 637.

The average death-rate for the ten years 1893—1902 was 17·9, so that the city death-rate has declined considerably.

The increase in the death-rate in 1903, as compared with the year 1902, is chiefly accounted for by the increase in the number of deaths due to the following causes :—

				Total deaths in 1903.	Total deaths in 1902.	Increase in 1903.	
Smallpox	...	...	...	5	1	4	} 64
Measles	...	...	...	43	39	4	
Scarlatina	...	...	...	13	6	7	
Diphtheria	...	...	...	9	7	2	
Whooping Cough	...	...	...	36	15	21	
Diarrhœa	...	...	...	45	19	26	} 52
Enteritis	...	...	...	13	7	6	
Premature Birth	...	...	...	49	33	16	
Developmental Diseases	...	...	...	118	94	24	
Infantile Convulsions	...	...	...	54	42	12	
Septic Diseases...	...	...	...	19	10	9	
Diseases of Stomach	...	...	...	15	7	8	
Obstruction of Intestines	...	...	...	10	4	6	
Bronchitis and Pneumonia	...	...	...	204	187	17	
Cirrhosis of Liver	...	...	...	17	10	7	
Suicide ...	...	...	...	10	6	4	
Insanity ...	...	...	...	10	5	5	
Rheumatic Fever	...	...	...	6	4	2	

Had there not been such a large increase (viz. 64) in the number of deaths due to the principal zymotic diseases (enteric fever excepted), in the number of deaths (52) due to the group—premature birth, developmental diseases, and infantile convulsions—and in those due to bronchitis and pneumonia (17), the general death-rate for 1903 would have been less than that for 1902, viz. 15·0 per 1,000.

The year 1902 was certainly an exceptionally good one for York, and constituted a rather severe standard for future comparison. It is to be regretted that the year 1903 does not bear favourable comparison with it. Notwithstanding the cold and wet summer season of 1903, there were 26 more deaths due to diarrhœa than in 1902, and the depressing effect of that season upon the general health appeared to conduce to an epidemic of measles and whooping-cough, and to much more bronchitis, pneumonia, and gastro-intestinal disease than usual during the winter 1903–04, whilst the increase in the group of infantile diseases is very unsatisfactory, and shows the need for much more work in the reduction of infantile mortality.

On the other hand there has been a decided decrease in the number of deaths due to the following causes :—

	Total Deaths, 1903.	Total Deaths, 1902.	Decrease in 1903.
Typhoid (Enteric) Fever	5	12	7
Accidents	23	29	6
Tuberculosis of Meninges	17	29	12
Bright's Disease	21	31	10
Cerebral Hemorrhage	62	76	14
Accidents and Diseases of Parturition	3	8	5

The distribution of the deaths of York Citizens, according to Registration Sub-districts and age-periods, was as follows:—

AGE-PERIOD.	DISTRICT.				Total.
	Bootham.	Micklegate.	Walmgate.		
0—1 ...	74	101	184	...	359
1—5 ...	25	47	122	...	194
5—15 ...	16	18	36	...	70
15—25 ...	7	12	13	...	32
25—65 ...	93	113	164	...	370
65 and over...	88	91	100	...	279
Totals ...	303	382	619		1,304

Of the deaths in Walmgate District, 27 were of persons connected with the regiments stationed in the various Barracks in that district.

Only two deaths were registered as uncertified (*i.e.*, uncertified by medical attendant or by Coroner) in the whole city, being 0·15 per cent. of total deaths, as compared with an average of 1·1 per cent. for the 76 Great Towns, and a percentage as high as 5 and 6 in other Great Towns. York stands always very satisfactorily in this respect, to the credit of our citizens and our Sub-Registrars.

General death-rate in each Registration Sub-district of the City during the year 1903, calculated on estimated population of that district:—

	Estimated Population of District.	Death-rate.	
Bootham District ...	22,230	13·6	} Whole City, 16·2.
Micklegate do. ...	26,568	14·3	
Walmgate do. ...	31,388	19·0	

THE LOCAL GOVERNMENT BOARD'S TABLES.

In the accompanying tables deaths occurring in the Public Institutions are allotted to the Sub-Registration Districts, or other localities, according to the addresses of the deceased.

It will be observed that deaths of "Non-residents" are excluded from certain calculations, and deaths of "Residents" are included, according to the instructions of the Local Government Board. The Board defines "Non-residents" as persons brought into the District on account of illness and dying there; and "Residents" as persons who have been taken out of the District on account of illness and have died elsewhere.

Deaths of York residents (total 158) occurring in the Public Institutions within the City during the year 1903:—

York Union Workhouse, 86, of whom	{	26 had resided in Bootham Sub-Registration District.
	{	17 had resided in Micklegate Sub-Registration District.
	{	43 had resided in Walmgate Sub-Registration District.
York Lunatic Hospital (Bootham Asylum), 5, of whom	{	3 had resided in Bootham District.
	{	2 „ „ Micklegate „
	{	0 „ „ Walmgate „
York County Hospital (General Infirmary), 66, of whom	{	20 had resided in Bootham District.
	{	16 „ „ Micklegate „
	{	30 „ „ Walmgate „

The Retreat (Asylum) 1, belonging to the Walmgate District.

In the statistical tables the above deaths are allocated to the Sub-Registration Districts in which the deceased resided.

Deaths of “Non-Residents,” *i.e.*, persons coming into the District and dying in Public Institutions, &c. :—

At the Union Workhouse	...	...	...	12
At Bootham Asylum	...	...	...	7
At the Retreat...	...	...	...	5
At the County Hospital	...	...	...	25
At Private Institutions	...	...	...	3
				<hr/>
				52
By drowning in River Ouse	...	...	...	1
				<hr/>
			Total	53
				<hr/>

Deaths of “Residents,” *i.e.*, persons going out of the District on account of sickness or infirmity, and who died in Public Institutions, &c., elsewhere :—

At York Corporation Fever Hospital, 10	{	3 from Bootham District.
	{	3 „ Micklegate „
	{	4 „ Walmgate „
At the North Riding Asylum, Clifton, 1		1 from Walmgate District.
At York Corporation Small-pox Hospital, 5	{	4 from the Union Workhouse.
	{	1 „ Micklegate District.
In a Leeds Hospital ...	1	1 from Bootham District.
In a Rural District outside the City, 1		1 from Bootham District.
		<hr/>
		Total ... 18
		<hr/>

LOCAL GOVERNMENT BOARD'S TABLE 1.
CITY OF YORK.

Vital Statistics of Whole District during 1903 and Previous Years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DIST.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN DISTRICT.	Deaths of Non-residents registered in District. Public Inst.	Deaths of Residents registered beyond District in Public Inst.	DEATHS AT ALL AGES. NETT.	
		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		Number.	Rate*					
		Number.	Rate per 1,000 Births registered.	Number.	Rate*							
1	2	3	4	5	6	7	8	9	10	11	12	13
1893	69,388	2014	29.0	No records available.	No records available.	1385	19.9	No records available.	No records available.	No records available.	No records available.	No records available.
1894	70,392	2177	30.8			1231	17.4					
1895	71,396	2218	31.0			1372	19.2					
1896	72,500	2209	30.4			1295	17.8					
1897	73,604	2269	30.8			1392	19.3					
1898	74,708	2243	30.0			1407	19.3					
1899	75,812	2301	30.3			1308	17.2					
1900	76,916	2256	29.3			1613	20.9					
1901	78,044	2361	30.2			1331	17.0					
1902	79,114	2339	29.5			1257	15.8					
Averages for years— 1893-1902, or 6 years, 1897-1902.	74,186	2238	30.1	384	167.8	1359	18.3	194	42	—	1347	17.6
1903	80,186	2337	29.1	359	153.6	1339	16.7	210	53	18	1304	16.2

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought nto the district on account of sickness or infirmity, and dying in public institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere. (For further details see Text of the Report.)

Area of District in acres (exclusive of area covered by water	...	...	Total population at all ages...	...	77,914
	...	...	Number of inhabited houses...	...	16,550
	...	...	Average number of persons per house	...	4.7

At Census of 1901.

LOCAL GOVERNMENT BOARD'S TABLE II.
CITY OF YORK.—VITAL STATISTICS OF THE SUB-REGISTRATION DISTRICTS IN 1903 AND PREVIOUS YEARS.

NAMES OF LOCALITIES.	1. Whole City.				2. Bootham Sub-Registra- tion District.				3. Micklegate Sub-Registra- tion District.				4. Walmgate Sub-Registra- tion District.			
	Population estimated to middle of each Year.	Births Registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each Year.	Births Registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each Year.	Births Registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each Year.	Births Registered.	Deaths at all Ages.	Deaths under 1 Year.
YEAR.																
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
Averages of 10 Years 1893-1902, or 6 years, 1897 to 1902 }
1903

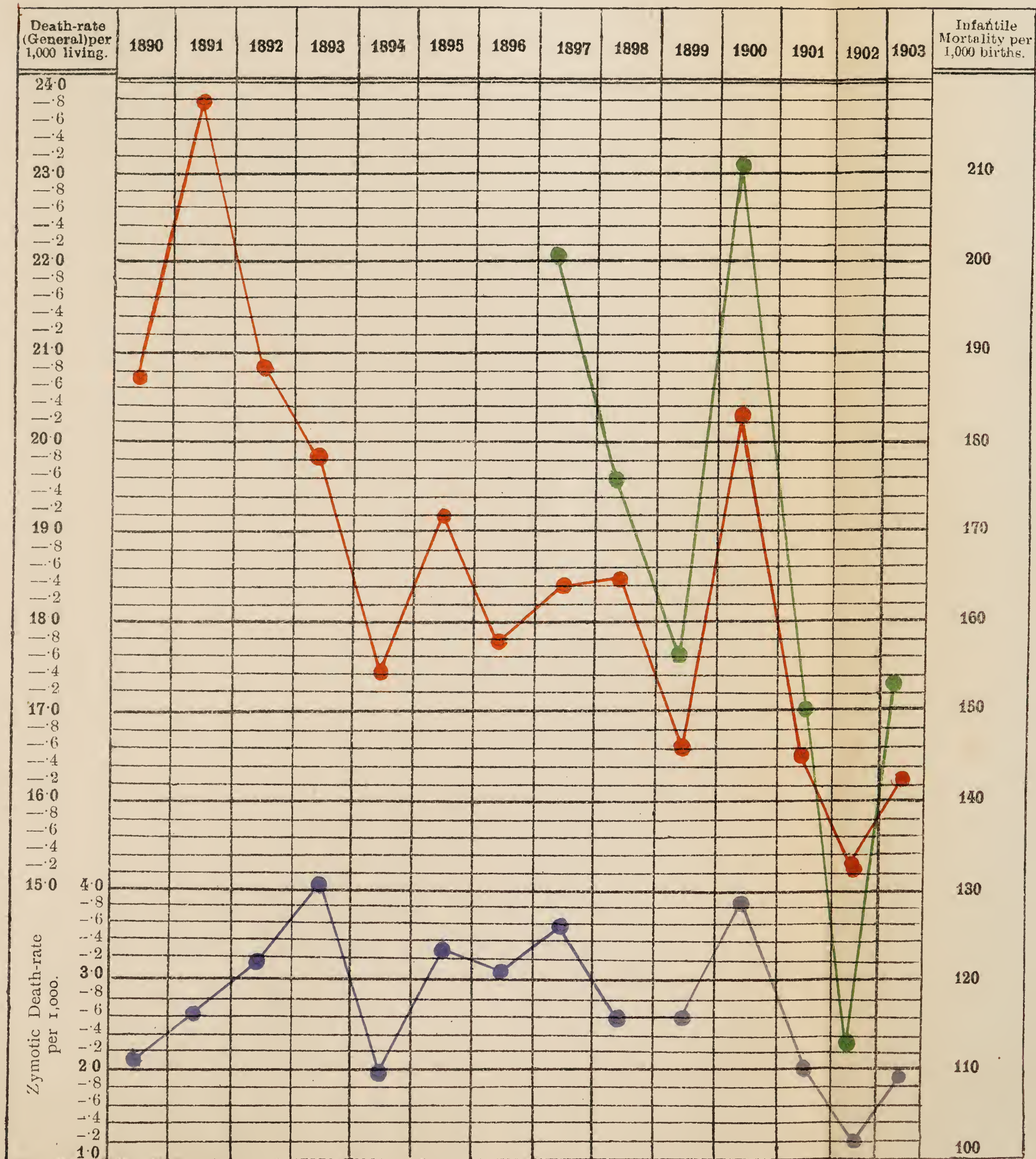
NOTES.—Deaths of residents occurring in public institutions beyond the district are included in sub-columns c of this table, and those of non-residents registered in public institutions in the district excluded. (See note on Table I. as to meaning of terms “resident” and “non-resident.”)
Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities, according to the addresses of the deceased.

TABLE IV. (CORRESPONDING TO LOCAL GOVERNMENT BOARD'S TABLE IV.)
CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1903.
(Modified Shorter Schedule B of Incorporated Society of Medical Officers of Health.)

No.	Causes of Death.	Deaths in whole City at subjoined ages.							Causes of Death distributed according to Sub-Registration Districts.				Deaths in Public Institutions (Residents.)
		All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Whole City.	Booth'm	Mickle-gate.	Walm-gate.	
1	Small-pox	5	...	...	...	...	3	2	5	4	1	0	5
2	Measles	43	8	34	1	...	...	...	43	2	0	41	...
3	Scarlet Fever	13	0	6	7	...	...	...	13	2	5	6	8
4	Diphtheria, Membranous Croup	9	0	6	3	...	...	...	9	3	2	4	1
5	Whooping-cough	36	16	17	3	...	...	...	36	9	9	18	1
6	Typhus Fever	...	...	...	...	...	...	...	0	...	...	...	...
7	Enteric Fever	5	0	0	2	...	3	...	5	2	1	2	...
8	Diarrhoea and Dysentery	45	34	9	0	1	1	...	45	11	10	24	3
9	Epidemic or Zymotic Enteritis...	0	...	...	...	...	...	...	...	...	...	...	...
10	Other Continued Fevers	0	...	...	...	...	...	...	0	...	...	...	...
11	Epidemic Influenza	11	0	1	1	1	4	4	11	6	3	2	...
12	Enteritis...	13	11	2	...	...	...	...	13	1	2	10	...
13	Croup	2	1	1	...	...	...	...	2	0	2	0	...
14	Erysipelas	5	3	...	...	...	2	...	5	0	2	3	1
15	Puerperal Fever	2	...	...	...	...	2	...	2	0	0	2	...
16	Other Septic Diseases												
17	(Septicæmia, Abscess, &c.) Intermittent Fever and Malarial Cachexia	19	1	3	3	3	7	2	19	5	4	10	7
18	Tuberculosis of Meninges	0	...	...	...	...	...	...	...	...	...	...	...
19	Tuberculosis of Lungs	17	3	6	7	15	67	3	17	4	6	7	2
20	Other forms of Tuberculosis	98	1	4	8	1	6	0	98	21	30	47	18
21	Alcoholism	18	3	3	5	1	4	...	18	5	9	4	2
22	Cancer	4	...	...	...	...	37	30	4	1	2	1	...
23	Premature Birth	68	...	...	1	...	...	...	68	18	22	28	12
24	Developmental Diseases...	49	49	...	...	...	...	...	49	17	14	18	1
25	Old Age	118	101	16	1	...	...	...	118	24	28	66	7
26	Meningitis	92	...	...	...	...	...	92	92	31	31	30	15
		14	5	6	2	1	...	...	14	0	7	7	2

CHART SHOWING THE GENERAL AND ZYMOTIC DEATH-RATES OF THE CITY DURING RECENT YEARS.

Red Line = General Death-rate. Blue Line = Zymotic Death-rate. Green Line = Infantile Mortality per 1,000 births



The high Death-rate in 1891 was due to the Influenza Epidemic
The high Death-rate in 1900 was due to the Typhoid Epidemic.

TABLE B. QUARTERLY TOTALS, 1903.

Quarter of Year.	Sub-Registration Districts.	Total Deaths Zymotic Diseases.	Total Deaths Diarrhœa.	Total Deaths Developmental Diseases.	Total Deaths Phthisis.	Total Deaths Bronchitis and Pneumonia.	Total Deaths under One Year of Age.	TOTAL DEATHS.
First.	Bootham...	1	0	9	6	7	22	86
	Micklegate...	3	1	5	5	10	17	86
	Walmgate...	4	0	17	14	20	30	120
	TOTALS ...	8	1	31	25	37	69	292
Second.	Bootham...	1	0	8	4	8	12	62
	Micklegate...	1	0	9	9	13	20	97
	Walmgate...	5	0	14	5	15	32	112
	TOTALS ...	7	0	31	18	36	64	271
Third.	Bootham...	14	8	3	5	4	15	62
	Micklegate...	14	5	10	7	5	39	94
	Walmgate...	20	15	16	8	10	51	127
	TOTALS ...	48	28	29	20	19	105	283
Fourth.	Bootham...	17	3	4	6	13	25	93
	Micklegate...	10	4	4	9	27	25	105
	Walmgate...	66	9	19	20	72	71	260
	TOTALS ...	93	16	27	35	112	121	458
	TOTALS FOR WHOLE YEAR	156	45	118	98	204	359	1304

TABLE C. QUARTERLY DEATH-RATES FOR SIX YEARS, 1898—1903.

GENERAL DEATH-RATE PER 1,000 LIVING :—							DEATH-RATE DUE TO BRONCHITIS AND PNEUMONIA, PER 1,000 LIVING:—						
Quarter of Year.	1898	1899	1900	1901	1902	1903	Quarter of Year.	1898	1899	1900	1901	1902	1903
First ...	20·6	17·0	24·5	15·7	19·7	14·6	First...	...	3·6	6·5	2·2	3·6	1·8
Second ...	17·4	14·7	18·5	16·2	15·0	13·5	Second ...	...	2·2	3·4	2·0	2·1	1·8
Third ...	20·4	22·6	23·7	18·6	12·7	14·1	Third ...	...	1·3	1·2	0·7	1·1	0·9
Fourth ...	19·0	16·9	17·3	14·7	14·7	22·9	Fourth	3·1	3·6	2·8	2·5	5·6
Whole Year.	18·5	16·6	20·3	16·5	15·3	16·2	Whole Year	3·0	2·5	3·2	1·9	2·3	2·5

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ZYMOTIC DEATH-RATE PER 1,000 LIVING :—							INFANTILE MORTALITY (AGES 0—1 YEARS), PER 1,000 BIRTHS :—						
First ...	1·3	0·3	2·4	0·46	2·18	0·40	First...	...	84	164	99	136	116
Second ...	1·1	0·16	2·0	0·56	1·11	0·35	Second ...	...	99	142	123	116	109
Third ...	5·1	8·3	8·5	5·6	0·96	2·40	Third ...	...	377	361	256	119	177
Fourth ...	1·4	1·4	2·3	1·1	1·13	4·65	Fourth ...	...	99	161	105	93	213
Whole Year.	2·6	2·6	3·8	1·96	1·25	1·94	Whole Year	175	156	211	150	113	153

To compare the recorded death-rate with that of other towns it is necessary to make an allowance for the difference in age and sex constitution of the different towns. This is done by obtaining from the standard death-rate of each town the "Factor for correction," and multiplying the Recorded death-rate by this Factor—the resulting figure is "the Corrected death-rate."

The "Standard" death-rate signifies the rate at all ages calculated on the hypothesis that the rates for each sex at each of 12 age-periods in each town were the same as in England and Wales during the 10 years 1891-1900, the rates at all ages in England and Wales during that period having been 18·21 per 1,000.

The "Factor for Correction" is obtained by dividing the "Standard" death-rate in England and Wales by the "Standard" death-rate in each town.

Comparative mortality figure :—After making approximate correction for differences of age and sex constitution, the same number of lives that in the year 1903 gave 1,000 deaths for England and Wales as a whole, gave 1,121 in the 76 Great Towns, and 1,087 in the City of York.

In this list of comparative mortality figures, York stands 38th in the order of merit of the 76 Great Towns.

TABLE D.

In his Annual Summary for 1903 the Registrar General gives the following figures :—

	Standard death- rate, 1891—1900.	1903.		
		Recorded death- rate.	Corrected death- rate.	Comparative Mortality figure.
England and Wales ...	18·21	15·41	15·41	1,000
76 Great Towns ...	17·14	16·26	17·27	1,121
City of York ...	17·69	16·27	16·75	1,087

TABLE E.

The following comparative figures for 1903 are compiled from the Registrar General's Summary for 1903, and from a Table in the *British Medical Journal*.

	Estimated Population 1903 (approx.)	Corrected General death-rate.	Zymotic death- rate.	Deaths of Children under one year of age per 1,000 births.
England and Wales ...	—	15·41	1·46	132
76 Great Towns ...	15,075,011	17·27	1·89	144
City of York ...	80,186	16·75	1·94	153
Other Towns about the same size as York :—				
Huddersfield ...	95,000	17·97	0·84	120
Halifax ...	107,000	16·30	0·72	122
Middlesborough ...	95,000	23·46	2·97	186
West Hartlepool ...	67,000	15·68	0·80	129
South Shields... ..	105,000	18·20	1·09	131
Rochdale ...	85,000	18·97	1·36	141
Burnley ...	99,500	21·62	2·82	217
Newport (Mon.) ...	70,000	17·00	1·73	146
Swansea ...	95,500	19·95	2·30	165
Rotherham ...	57,000	18·27	2·94	181
Preston ...	114,500	20·45	3·09	161
Wolverhampton ...	97,000	16·09	1·97	141
Walsall ...	90,000	17·44	1·13	150
Aston Manor ...	79,500	15·41	2·26	161
Coventry ...	72,600	16·20	1·99	122
Grimsby ...	65,700	15·19	1·94	167
Derby ...	118,700	14·65	0·87	128
Stockport ...	95,700	19·91	2·34	185
Birkenhead ...	113,600	17·89	2·06	156
St. Helen's ...	87,000	19·20	1·88	142
Warrington ...	66,400	20·15	3·29	153
Wigan ...	62,000	24·47	4·18	180
Bootle ...	60,700	21·04	2·71	165
Devonport ...	73,800	14·83	0·94	118
Plymouth ...	112,000	16·09	1·16	144
Norwich ...	114,300	14·57	1·13	150
Northampton ...	90,000	14·72	1·54	139
Reading ...	75,000	13·17	0·94	121
Southampton ...	110,000	13·71	1·31	116
Hastings ...	66,000	12·41	0·69	106
Walthamstow... ..	106,000	11·75	1·91	113
Leyton ...	107,000	11·12	1·64	103
East Ham ...	110,500	11·70	1·62	111
Tottenham ...	109,700	14·06	1·90	124
Hornsey ...	78,400	8·96	0·68	84

TABLE F.
COMPARISON OF DEATH-RATES PER 1,000 LIVING
IN YEAR 1903.

	Averages for England and Wales.	Average of the 76 Great Towns (including York).	Average of the 103 smaller towns.	Rural England and Wales.	York.
*Death-rate	15·4	16·3	14·6	14·8	16·2
Infantile Mortality (per 1,000 births)	132	144	135	118	153
Zymotic death-rate.....	1·46	1·89	1·41	1·08	1·94
Measles death-rate.....	0·27	0·36	0·29	0·17	0·53
Scarlet Fever death-rate...	0·12	0·14	0·12	0·10	0·16
Diphtheria death-rate.....	0·18	0·20	0·16	0·17	0·11
Whooping Cough death- rate	0·27	0·33	0·28	0·22	0·45
Typhoid Fever death-rate	0·10	0·12	0·11	0·09	0·06
Diarrhœa Death-rate	0·50	0·71	0·43	0·31	0·56
Smallpox death-rate	0·02	0·03	0·02	0·02	0·06

Infantile Mortality.

The nett total number of deaths under one year of age in 1903 was 359, or 153·6 per 1,000 births; or 27·5 per cent. of the nett total number of deaths at all ages.

The York average for the ten years 1893—1902 was 170, as compared with 152 for England and Wales.

The deaths in 1903 occurred as follows :—

	Bootham District.	Micklegate District.	Walmgate District.	Totals.
First quarter ...	22	17	30	69
Second ,, ...	12	20	32	64
Third ,, ...	15	39	51	105
Fourth ,, ...	25	25	71	121
	74	101	184	359

* The death-rate for England and Wales in 1903 is lower than ever previously recorded.

The rates per 1,000 births were as follows :—

Bootham Sub-Registration District, 136 per 1,000 births in that district.				
Micklegate	„	„	131	„
Walmgate	„	„	179	„

In compiling the statistics, year by year, it has occurred to me that the infantile mortality figure is somewhat unfairly loaded by the number of deaths due to prematurity of birth,—cases in which from the very first the chance of life is very small, lasting usually from only a few seconds to a few days. It appears unfair to add these without qualification to the deaths which occur later on in infantile life, when life has had greater chances. The following table will therefore be of interest :—

YORK.										
		No. of deaths.		Proportion per 1,000 births.	Per centage of total deaths at all ages.		Proport on per 1,000 births, after deducting the deaths due to Premature Birth.		Proportion per 1,000 births, En: land and Wales.	
Previous years.	1897	... 455	...	200·5	...	33·5	...	—	...	156
	1898	... 394	...	175·6	...	28·4	...	154	...	161
	1899	... 359	...	156·0	...	28·4	...	141	...	163
	1900	... 477	...	211·4	...	30·4	...	191	...	154
	1901	... 355	...	150·3	...	27·4	...	133	...	151
	1902	... 265	...	113·2	...	21·8	...	99	...	133
	1903	... 359	...	153·6	...	27·5	...	132	...	132

DEATHS OF CHILDREN UNDER AGE OF 5 YEARS.

The nett total number of deaths of children under the age of 5 years (0—5) was 553, or 42·4 per cent. of the nett total of deaths at all ages, or 6·8 per 1,000 living at all ages in whole City.

Percentage in previous years	1897	... 576 deaths, or 42·2 per cent.
	1898	... 551 „ 39·7 „
	1899	... 477 „ 37·7 „
	1900	... 662 „ 42·2 „
	1901	... 470 „ 36·3 „
	1902	... 403 „ 33·1 „
	1903	... 553 „ 42·4 „

They were distributed as follows :—

- Bootham Registration Sub-District—
99 deaths, or 4·45 per 1,000 living at all ages in that district.
- Micklegate Registration Sub-District—
148 deaths, or 5·57 per 1,000 living at all ages in that district.
- Walmgate Registration Sub-District—
306 deaths, or 9·74 per 1,000 living at all ages in that district.

They occurred during the year as follows :—

	Bootham District.	Micklegate District.	Walmgate District.	Totals.
First quarter ...	29	26	39	94
Second ,, ...	17	34	41	92
Third ,, ...	18	49	68	135
Fourth ,, ..	35	39	158	232
	99	148	306	553

Of these deaths under the age of five years it will be observed that :—

Over 55 per cent. were in Walmgate district ; nearly 42 per cent. were in the fourth quarter of the year (owing to the epidemic of Measles, Whooping-Cough and allied diseases, Bronchitis, Pneumonia, &c.)

Over 67 per cent. of the deaths in that quarter and 50 per cent. of the deaths in the third quarter were in Walmgate district.*

* These figures go to show that although Walmgate district contributes the largest proportion of the birth-rate, there is very great need for the education of the large number of poor people in that district in the rearing and care of their children.

The general mortality in 1903, in three age-groups, in the three Registration Sub-Districts, was as follows :—

	Age 0—1.	Age 1—5	At all ages over 5.	Totals.
Bootham District ...	74	25	204	303
Micklegate ,, ...	101	47	234	382
Walmgate ,, ...	184	122	313	619
Totals	359	194	751	1304

The chief causes of death amongst these 553 children at 0—5 years of age were as follows, and are compared with the two previous years :—

	1901	1902	1903
Premature Birth ...	50	33	49
Developmental Diseases ...	116	93	117
“Convulsions” (only cause named) ...	40	42	54
Tuberculosis { Tubercular Meningitis, { Tabes Mesenterica, &c. }	25	35	20
Measles ...	9	37	42
Whooping Cough ...	16	14	33
Summer Diarrhœa ...	95	19	43
Bronchitis and Pneumonia ...	59	82	129
Accidents ...	12	9	6
Meningitis (only cause named) ...	17	10	11
Enteritis ...	9	4	13
Scarlet Fever ..	5	5	6
Diphtheria ...	2	4	6
Erysipelas and other Septic Diseases ...	3	6	7

It is interesting to enquire further into these causes of the infantile mortality, which still continues serious in extent, notwithstanding the progress of hygienic education and of general sanitation. First, the group of

DEVELOPMENTAL DISEASES.

This group comprises the deaths registered as due to "Injury at Birth," "Debility at Birth," Atelectasis (incomplete development of lungs), Congenital defects (malformed heart, harelip, cleft palate, malformed spine, hydrocephalus, &c.), "want of breast milk," atrophy, debility, "marasmus," dentition (teething), and rickets.

There is a proportion of these deaths that is not preventible, but there is a larger proportion that is distinctly preventible.

Prominent causes of the high mortality due to these diseases may be stated as follows :—

- 1.—Carelessness and ignorance as to the rearing of infants on the part of parents and untrained nurses.
- 2.—There is a very great amount of improper feeding of infants,—with improper, unsuitable, positively dangerous foods, and feeding bottles.
- 3.—Excessive feeding of children.
- 4.—Under feeding—starvation.
- 5.—Positive neglect of children and of their ailments.
- 6.—Inherited constitutional conditions.
- 7.—Early marriages, improvident marriages, unhealthy marriages.
- 8.—Untrained midwifery.
- 9.—And, probably, infant insurance.

The following figures are of considerable interest :—

PREMATURE BIRTH.

DEVELOPMENTAL DISEASES.

Registration Sub-District.		Whole City.	Registration Sub-District.		Whole City.		
					Age 0—1.	Age 1—15.	Total.
Bootham	17	49	Bootham	24	101	17	118
Micklegate	14		Micklegate	28			
Walmgate	18		Walmgate	66			

As deaths from "CONVULSIONS" (where no other cause for death is assigned, in which case the death is classified under that other cause,

“ Developmental Diseases,” “ Meningitis,” or whatever it may be) are largely due to the same predisposing causes as the “ Developmental Diseases,” they may be set out similarly :—

Registration Sub-District.	Whole City.		
	Age 0—1.	Ages 1—5.	Total.
Bootham 7	44	10	54
Micklegate 16			
Walmgate 31			

“ Developmental Diseases ” and “ Convulsions ” together :—

Registration Sub-District.	Whole City.		
	Age 0—1.	Ages 1—15.	Total.
Bootham 31	145	27	172
Micklegate 44			
Walmgate 97			

The 145 deaths from Developmental Diseases and Convulsions under the age of one year are equal to a death-rate of 62 per 1,000 births

INQUESTS ON ACCIDENTS, &c.

During the year 24 Inquests were held on the deaths of children under the age of 5 years, 2 of children belonging to Bootham District, 10 to Micklegate, and 12 to Walmgate District. The causes of death were registered as follows :—

Convulsions	12	Suffocated in bed	2
Debility	4	Accidental Drowning	1
Bronchitis and Pneumonia ...	1	Scalds and Burns	2
Croup	1		
Diarrhœa	1		
Total due to illness	19	Total accidents	5

The further consideration of the infantile mortality leads to the consideration of the

DEATHS DUE TO THE SEVEN PRINCIPAL ZYMOTIC DISEASES.

SMALL-POX, MEASLES, SCARLATINA, WHOOPING COUGH, DIPHTHERIA, FEVER
(TYPHUS AND TYPHOID), AND SUMMER DIARRHŒA.

The total number of deaths from the seven principal Zymotic Diseases in the year 1903 was 156, equivalent to a death-rate of 1·94 per 1,000 living at all ages, as compared with 1·25 for 1902.

There were 111 deaths due to the Zymotic Diseases *exclusive* of Zymotic Diarrhœa, equivalent to 1·38 per 1,000 living at all ages.

There were 45 deaths due to Zymotic Diarrhœa only, equivalent to a death-rate of 0·56 per 1,000 living at all ages. Of these 45 deaths, 34 were of children under one year of age (as compared with 13 last year).

The average zymotic death-rate of the 76 great towns for 1903 was 1·89.

The average diarrhœa death-rate for the 76 great towns was 0·71.

The average zymotic death-rate for York for the 9 years, 1894—1902, was 2·35.

The average diarrhœa death-rate for the same period was 1·39.

It will be seen that as regards the Zymotic death-rate for 1903, as a whole, and as regards the typhoid and diarrhœa death-rates in particular, York comes out creditably as compared with the average for the 76 Great Towns (which include York), and as compared with the averages for the preceding ten years. Unfortunately, this does not hold good for all the other zymotic diseases in York in 1903, as the following table, partly compiled by the Registrar-General, shows :—

TABLE G. ZYMOTIC DEATH-RATES, 1894-1902 and 1903.

	Average Death-rate in York, 1894—1902.	Death-rate in York, 1903.	Average Death-rate, 76 Great Towns, 1903.
Smallpox	0·00	0·06	0·03
Measles	0·31	0·53	0·36
Scarlet Fever	0·06	0·16	0·14
Diphtheria	0·05	0·11	0·20
Whooping Cough	0·30	0·45	0·33
Typhoid Fever	0·24	0·06	0·12
Diarrhœa	1·39	0·56	0·71
Total Zymotic Diseases...	2·35	1·94	1·89
Infantile Mortality (per 1,000 Births) ...	170	153	144

From this table it will be seen that in 1903 the York death-rates for Smallpox, Measles, Scarlet Fever, Diphtheria and Whooping Cough were in excess of York's averages for the preceding 10 years, whilst those for Typhoid Fever and Diarrhœa had considerably diminished, as also the whole zymotic death-rate.

The death-rates for Smallpox, Measles, Scarlet Fever, and Whooping Cough in York in 1903 were in excess of those for the 76 Great Towns, whilst the Diphtheria, Typhoid, and Diarrhœa death-rates were markedly less than those for the 76 Great Towns.

So that whilst the city has suffered during 1903 by reason of the prevalence of Measles and Whooping Cough, and by the fatality of its cases of Scarlet Fever, Smallpox and Diphtheria, yet it is to be congratulated on the markedly reduced death-rates from Typhoid Fever and Diarrhœa, and credit may be taken for good results of the extensive sanitary work carried out in the city during the last few years.

The following are the figures for recent years :—

Year.	Entire Zymotic mortality.				Zymotic Diarrhœa only.			
	No. of deaths.		Rate per 1,000 living.		No. of deaths.		Rate per 1,000 living.	
1890	...	141	...	2·12	...	84	...	1·26
1891	...	181	...	2·70	...	89	...	1·32
1892	...	218	...	3·21	...	97	...	1·43
1893	...	284	...	4·09	...	194	...	2·70
1894	...	147	...	2·08	...	69	...	0·98
1895	...	243	...	3·43	...	183	...	2·56
1896	...	227	...	3·13	...	146	...	2·01
1897	...	264	...	3·58	...	182	...	2·50
1898	...	190	...	2·54	...	120	...	1·66
1899	...	191	...	2·51	...	147	...	1·93
1900	...	297	...	3·86	...	158	...	2·05
1901	...	153	...	1·96	...	102	...	1·30
1902	...	99	...	1·25	...	19	...	0·24
1903	...	156	...	1·94	...	45	...	0·56

The occurrence of deaths due to the seven principal Zymotic Diseases in 1903 was distributed as follows :—

		Bootham District.		Micklegate District.		Walmgate District.		Total.
Smallpox	...	...	4	...	1	...	0	5
Measles...	.	...	2	...	0	...	41	43
Scarlet Fever	...	...	2	...	5	...	6	13
Diphtheria	...	...	3	...	2	...	4	9
Whooping Cough	...	...	9	...	9	...	18	36
Typhoid Fever...	...	...	2	...	1	...	2	5
		22		18		71		111
Zymotic or Summer								
Diarrhœa	...	...	11	...	10	...	24	45
		33		28		95		156

TABLE H.

DEATHS IN THE CITY OF YORK FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES

IN EACH OF THE YEARS 1893-1903.

DISEASE.	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Small-pox	6	0	0	0	0	1	0	0	0	1	5
Measles	30	27	10	31	28	36	7	40	10	39	43
Scarlet Fever	2	2	4	6	1	8	4	8	7	6	13
Diphtheria	7	4	6	2	5	2	4	6	3	7	9
Whooping Cough	4	39	18	31	28	6	3	47	16	15	36
Typhoid Fever	41	6	22	11	20	17	26	38	15	12	5
Diarrhoea	194	69	183	146	182	120	147	158	102	19	45
TOTALS	284	147	243	227	264	190	191	297	153	99	156

ZYMOTIC DIARRHŒA.

The deaths due to Zymotic or Summer Diarrhœa were distributed as follows:—

Registration Sub-District.		Whole Year.	Third Quarter of Year.	Fourth Quarter of Year.
Bootham ...	...	11	8	3
Micklegate...	...	10	5	4
Walmgate ...	...	24	15	9
TOTAL, Whole City		45	28	16

At Ages		Whole Year.	3rd Quarter.	4th Quarter.
0—1 ...	...	34	20	13
1—5 ...	...	9	7	2
Over 5 ...	...	2	1	1
All ages ...		45	28	16

Of the 45 deaths of the year, none were certified as due to "Epidemic or Zymotic Enteritis," but all as due to "Summer, Epidemic, or Zymotic Diarrhœa," and "Diarrhœa."

The third quarter of the year was unusually cold and wet, with the result that we had a low death-rate from Summer Diarrhœa.

The history of the third, the summer quarter of the year 1903—the Zymotic Diarrhœa period—is set forth in a table as follows:—

THIRD QUARTER, 1903 :—DEATHS.

District.	All Causes. Age 0—1		Diarrhœa. All Ages.	Developmental. Ages 0—5.		All Causes. All Ages.
Bootham ...	15	...	8	3	...	62
Micklegate	39	...	5	10	...	94
Walmgate	51	...	15	16	...	127
	105	...	28	29	...	283

The Infantile Mortality per 1,000 births in that quarter was 177.

In calculating *the Death-rate from Diarrhœa*, deaths certified under the following names are included:—

Diarrhœa, Choleraic Diarrhœa (Cholera Nostras), Intestinal Catarrh, Enteric Catarrh, Epidemic or Summer Diarrhœa, Gastro-Intestinal or Gastro-Enteric Catarrh, Dysentery or Dysenteric Diarrhœa, Cholera Infantum, Epidemic or Zymotic Enteritis, and also Gastric Catarrh, Gastro-Enteritis or Muco-Enteritis, *if of zymotic or epidemic character*.

A separate heading for "Epidemic or Zymotic Enteritis" is provided in Table IV., on the ground that this cause of death has only recently been scheduled by the Registrar-General as "Diarrhœa." By retaining this separate heading for a few years, it will be possible to ascertain the number of deaths which are transferred from "Enteritis" or "Gastro-Enteritis" to "Diarrhœa."

Deaths due to "Diarrhœa" occurring in the course of well-defined diseases such as "Tuberculosis," "Cancer," &c., are not included in the Diarrhœa death-rate or under the heading of "Diarrhœa" at all.

The heading "Enteritis," in Table IV., comprises Non-tubercular or Non-malignant Ulceration of the Intestines, Non-zymotic Enteritis, or Muco, or Gastro-Enteritis.

The late DR. BALLARD, in his famous Report on Summer Diarrhœa, arrived at the following conclusions :—

“ The summer rise of Diarrhœal Mortality does not commence until the mean temperature recorded by the 4-foot earth-thermometer has attained somewhere about 56° Fahrenheit, no matter what may have been the temperature previously attained by the atmosphere or recorded by the 1 foot earth-thermometer.

“ The decline of the Diarrhœal Mortality coincides with the decline of the temperature recorded by the 4 foot earth-thermometer, which temperature declines much more slowly than the atmospheric temperature or than that recorded by the 1 foot earth-thermometer.”

The micro-organisms producing Summer Diarrhœa, therefore, are most active in the 3rd quarter of the year (July 1st to September 30th), and their activity is unmistakeably associated with certain great conditions, viz., a high temperature, a low rainfall (with calm weather), a high soil temperature and a polluted soil, upon which follow pollution of atmosphere, and of milk and other foods.

During the third, the summer quarter of the year 1903, the maximum temperature of the air attained in York was 80, on July 9th and 10th. The highest temperature attained in August was only 70, and in September 73. The mean temperature of the air was 59·2 in July, 57·5 in August, and 54·1 in September, or 57·6 for the whole quarter.

The maximum temperature of the earth 4-feet down was only 57, which was attained on August 10th, and continued 10 days. The 4-foot earth temperature stood at 56 to 57 for a total of only 45 days.

The total rainfall in July was 3·16 inches, in August 2·02, in September 3·37, a total of 8·55 inches for the whole quarter.

In October the total rainfall was 6·95. (For further Meteorological Data, see Tables at end of Report.)

Special advice on the Prevention of Summer Diarrhœa was issued to the public by advertisement, repeated on two occasions, in *The Yorkshire Chronicle and Delittle's York Advertiser*, an advertising paper distributed gratis every week to 13,000 houses in the City and district. The advertisement occupied a whole column in each issue, and was published in the Annual Report for 1901.

MEASLES.

Measles was very prevalent and very fatal in the fourth quarter of the year.

There were 43 deaths during the year 1903, equal to a death-rate of 0.53 per 1,000 (53 per 100,000), as compared with the average 0.31 for the preceding 10 years, and 0.36 for the 76 great towns. The deaths in 1903 occurred as follows :—

District.			Ages.			Quarters of the Year.		
Bootham ...	2	...	0—1	8	...	1st—0		
Micklegate	0	...	1—5	34	...	2nd—3 (all in Walmgate)		
Walmgate...	41	...	5—15	1	...	3rd—1 (in Walmgate)		
Whole City	43	...	all ages	43	...	4th—39 (37 in Walmgate)		

It will be observed that the disease prevailed almost entirely in the fourth quarter of the year, and in Walmgate Sub-Registration District.

The outbreak began in November, and on the 21st November, Bilton Street School Infants' Department, Layerthorpe, was closed for one month, upon the advice of the Deputy Medical Officer of Health, Dr. Goode, 48 out of 128 Scholars being absent on account of the disease.

TABLE J.

MEASLES AND WHOOPING-COUGH.

DEATHS AND DEATH-RATES DURING PAST 10 YEARS.

MEASLES.							WHOOPING-COUGH.						
Total Deaths.			Death-rate per 1,000 living.		Death-rate per 100,000 living.		Total Deaths.			Death-rate per 1,000 living.		Death-rate per 100,000 living.	
1893	...	30	...	0.43	...	43	4	...	0.05	...	5		
1894	...	27	...	0.38	...	38	39	...	0.55	...	55		
1895	...	10	...	0.14	...	14	18	...	0.25	...	25		
1896	...	31	...	0.42	...	42	31	...	0.42	...	42		
1897	...	28	...	0.38	...	38	28	...	0.38	...	38		
1898	...	36	...	0.48	...	48	6	...	0.08	...	8		
1899	...	7	...	0.09	...	9	3	...	0.03	...	3		
1900	...	40	...	0.52	...	52	47	...	0.6	...	61		
1901	...	10	...	0.12	...	12	16	...	0.20	...	20		
1902	...	39	...	0.49	...	49	15	...	0.20	...	20		
1903	...	43	...	0.53	...	53	36	...	0.45	...	45		

WHOOPIING-COUGH

prevailed in the wake of this outbreak of Measles.

There were 36 deaths due to this fatal infantile disease during the year 1903, as compared with 15 in 1902.

The death-rate was 0.45 per 1,000 living (45 per 100,000), as compared with the average 0.30 for the preceding ten years, and 0.33 for the 76 great towns.

The deaths in 1903 occurred as follows:—

District.				Ages.		Quarter of the Year.	
Bootham	...	9	...	0—1	16	...	1st—1
Micklegate	...	9	...	1—5	17	...	2nd—0
Walmgate	...	18	...	5—15	3	...	3rd—9
Whole City	...	36	...	all ages	36	...	4th—26

A special leaflet of advice to parents about Whooping Cough was published and circulated in the affected districts. (See page 38).

On the 14th December, the Deputy Medical Officer of Health reported to the Health Committee as follows:—

RE CLOSURE OF SCHOOLS.

I have to report that my attention has recently been called to an outbreak of Measles and Whooping Cough of an epidemic nature in a number of Schools in the City.

The first School reported as suffering from an epidemic of Measles was the Bilton Street School, on November 10th. The Infants' Department only was closed, as reported, on the 21st November; the number affected in the Upper Classes was, at that time, only small.

Since then, the number of those suffering from Measles in the Upper Classes has gradually increased, fresh cases occurring every day, until there are 61 absent out of 329 (20 per cent. approximately).

The next School reported was the Fishergate Council School; 251 out of 1,130 absent on account of Whooping Cough.

As the epidemic was spreading, and there were many suspicious coughs in the various Classes at the time of my visit, the whole School was, on the 9th December, closed for a period of six weeks from that date until the 18th January, 1904.

Since then other Schools have been reported as suffering from the epidemic of Measles and Whooping Cough.

I should like to point out that during the two previous weeks, 21 deaths have occurred from Measles and Whooping Cough alone, and also a large number from Bronchitis and Pneumonia in Infants under 5 years, many of which are no doubt due to Whooping Cough.

Also that the high mortality in York lately may be chiefly attributed to this epidemic.

And also that the number of deaths have exceeded the number of births in the City during these two weeks.

As the epidemic has spread all over the City lying to the East side of the River, and is increasing, and appears to be gradually spreading to the other side of the River, I reported this serious state of things to the Chairman of this Committee, in order that the advisability of the immediate closure of all the Schools until January 18th, 1904, might be considered, and steps taken to stamp out the epidemic before the re-opening of the Schools.

The Committee, after giving careful consideration to the above Report of the Deputy Medical Officer of Health,

RESOLVED :—

That with the view of preventing the further spread of the disease referred to, the necessary steps be taken for closing the Public Elementary Schools in the City from 12 o'clock noon, on Tuesday, the 15th December, 1903, until the 18th January, 1904.

It was also Resolved :—

That the Education Committee be requested to give directions for the cleansing and ventilating of the Schools, so as to ensure their being free from risk of infection.

And that the Chairman and Deputy Medical Officer of Health be authorised to engage the services of Nurses for the purpose of visiting houses in the City, to give advice to parents of children who are suffering from Measles and Whooping Cough, and distribute handbills about these diseases. Two trained nurses did excellent work in this direction for some weeks, under the direction of the Deputy Medical Officer of Health.

The following leaflet of advice about Measles (see page 36) was drawn up by Dr. Goode and myself, published, and freely distributed in the affected districts.

It is to be noticed that both Measles and Whooping Cough were most prevalent and most fatal amongst children under 5 years of age, and they were most prevalent in the Infants' Departments of the Public Elementary Schools.

In a paper on the above subject recently delivered to the Incorporated Society of Medical Officers of Health by Dr. Howard Jones, of Newport, he re-emphasised the well-known medical fact that measles is most common and most fatal amongst children under 5 years of age, and that our Elementary Schools—the Infants' departments in particular—are, unfortunately, but undoubtedly, the chief medium of the spread of the contagion.

Dr. Jones proceeded logically to advocate the exclusion from the schools of all children under 5 years of age—attendance at school not being compulsory under that age—and estimated a national annual saving thereby of £1,250,000. I support Dr. Howard Jones's statements and conclusions.

Children under five years of age are the most susceptible to the diseases, Measles and Whooping Cough, and amongst them they are most severe and most fatal. Every year that the children escape attack increases their chances of escape, and their chances of recovery if they are attacked.

It is a very wrong thing, indeed, to regard measles "as an inevitable and innocuous trial of childhood." The attitude expressed by the phrase "only measles" accounts for more mortality in early childhood than from any other infectious disease.

Measles is a preventible disease, but a very difficult one to cope with and to suppress, owing to the fact that it is at no time more infectious than it is in its earliest stage, before a doctor is called in or before the disease is recognised. This fact makes hospital isolation only partially effective, and it is also very costly, as it requires more extensive accommodation than any other of the infectious diseases. Very few fever hospitals have sufficient accommodation to cope with it along with the other infectious diseases, and very few have tried the experiment—for the above reasons. On the other hand, isolation in cottage homes is practically impossible, and owing to that fact and to the mistaken "only measles" attitude it spreads rapidly from the infants through the household, not infrequently attacking the older children for a second time in their lives.

Now is it not a fact (1) that the Infant Department is largely a mere convenience for mothers? (2) That little real education is achieved therein? (3) And that, unless great care is exercised, the little delicate brains and eyes suffer strain, with serious after-effects in later childhood?

I have already pointed out the risks of Infants' Departments from the measles point of view.

There are also the risks of Chicken-pox, Scarlet Fever, and Whooping Cough.

We grant that the environment of, and care bestowed in Infants' Departments are often much superior to that in many homes, but in my experience and belief, as in that of Dr. Howard Jones, of Dr. Kerr, Medical Officer of the late London School Board, and of many other medical officers, Infants' Departments are on the whole, from a health point of view, a mistake—I might say a serious mistake—and we believe that their continuance will soon prove to be a very important matter for settlement.

The system of notification of cases of Measles, Whooping Cough, etc., to me, by Head Teachers of Schools, fell off largely during 1903, owing, I presume, to the cessation of Epidemic Grants by Government. A new system will probably be instituted soon.

The following is a copy of the leaflet on

MEASLES.

IMPORTANT ADVICE TO PARENTS.

An attack of Measles is usually not treated seriously enough, and the object of this Handbill is chiefly to show how the lives of children may often be saved and permanent injury to health prevented.

HOW TO TELL WHEN A CHILD HAS CAUGHT MEASLES.

A child who has caught measles becomes feverish, thirsty, and restless, the head and limbs ache, the eyes are red, swollen, and watery; there is a running from the nose, sneezing, and slight cough—just as if the child had caught a bad cold. The rash does not appear until three or four days afterwards.

THE COMPLICATIONS WHICH MAY RESULT FROM MEASLES.

If the child is kept in a warm room and properly treated, the cough goes and it recovers in twelve or fourteen days. It must be remembered that for another week or two the child may readily get Bronchitis and Inflammation of the Lungs from any exposure to chill.

Inflammation of the Eyes or Ears with discharge sometimes follows Measles, and blindness or deafness may result.

If any of these should occur a doctor should be called in.

HOW OTHER CHILDREN SHOULD BE PROTECTED.

As Measles is very infectious and causes many deaths, we must do all we can to prevent other children from catching it when it occurs in our own homes, and the Law imposes a Penalty of £5 for wilfully exposing others to the infection.

WE SHOULD THEREFORE REMEMBER :—

- (1) That Measles is very infectious, even when the child seems to be suffering from a bad cold only and before the rash appears. Therefore, when Measles is about, keep any child which has a bad cold apart from others and away from School and meetings for three or four days.
- (2) That Measles remains infectious for three weeks or longer if cough continues or there is a discharge from the eyes, ears, nose, or throat, and the infection is communicated by the breath and any discharge from the patient and by the clothing.
- (3) Every healthy child under four years and every delicate child must always be protected from infection to the very utmost, for the risk of the disease, ending in death, is very great in these. It is therefore a great mistake to think that it is better to allow the children to catch Measles in order to get it over while they are young.

- (4) When there is Measles in the house none of the children living there should be allowed to mix with other children, or to attend Day or Sunday School or Places of Worship or Amusement. It is also very dangerous for parents to visit their friends or to receive visits (especially from children) while there is a case of Measles in the house.
- (5) On recovery of the patient the room requires a little simple disinfection :
It is generally enough if the bedding and clothing are hung over the chairs and bed, the windows and doors are thrown wide open and the fresh air allowed to blow through the room for several hours (4 to 8), after which the child's body-linen and bed-linen should be well boiled in the copper; floors, windowsills and other level surfaces of the room scrubbed with plenty of soap and water.

HOW THE CHILD SHOULD BE TREATED:

As Measles often causes lifelong injury to health, it is very unwise not to call in a Doctor.

The child should be kept in bed and in one room until the rash has quite gone. A fire should be lighted in the room where possible, without making the room too hot.

The bed carefully placed out of all draughts, for these are very fatal to children with Measles. A little home-made Lemonade or the sucking of Ice will stop the thirst during the fever. Light and nourishing food should be given, such as milk and water, bread and milk, bread and butter, gruel, broths, custard, milk puddings, etc. The cough may be stopped by a little linseed tea. After an attack of Measles, the child is to be carefully guarded against chills for some weeks, flannel should be worn next to the skin, and if the child does not get strong, Cod Liver Oil should be given and plenty of fresh milk.

EDMUND M. SMITH, M.D., D.P.H.,

Medical Officer of Health.

HEALTH OFFICE, GUILDHALL, YORK.

The following is a copy of the leaflet on

WHOOPING COUGH.

IMPORTANT ADVICE TO PARENTS.

Whooping Cough is an infectious and often serious disease. It causes the death of one out of every four children who die in our large towns. The object of this handbill is to show how to treat Whooping Cough, and to prevent it from spreading.

HOW TO TELL WHEN A CHILD HAS CAUGHT WHOOPING COUGH.

Whooping Cough begins with a dry, hacking cough, running from the nose, sneezing, red watery eyes, and slight feverishness, just as if the child had caught a bad cold. The "whoop" does not appear until about ten days later, when a fit of short, rapid, noisy coughs is followed by a long, loud "whoop"; and the child often vomits after the coughing. The whole attack being like what happens when food goes the wrong way. Very young children often do not "whoop" at all, but we may know it to be Whooping Cough by the fits of coughing being followed by sickness and puffiness under the eyes.

COMPLICATIONS WHICH MAY FOLLOW.

Bronchitis and Inflammation of the Lungs often follow Whooping Cough and also convulsions, all of which are very fatal to young children. Therefore the child should be treated with great care from the beginning of the attack in order to avoid these complications.

HOW TO STOP WHOOPING COUGH FROM SPREADING.

The infection of Whooping Cough is spread chiefly by the breath when coughing. When Whooping Cough is about, any child with a cough should be kept apart from other children, and a doctor called in if the cough does not get better.

Every delicate child, and every healthy child under four must always be protected from infection to the very utmost, for the risk of the disease ending fatally is very great in these. It is therefore a mistake to let the children catch the disease while young in order to get it over.

HOW THE CHILD SHOULD BE TREATED.

The child should be kept in bed if feverish otherwise in a room with a fire in it, as this helps to keep the air of the room fresh.

Plenty of fresh milk should be given to the child and food given at frequent intervals, especially directly after sickness, to make up for the waste of food brought up by the coughing.

When the "whoop" continues, change of air is the best thing, and should be obtained where possible. After Whooping Cough, the child must be carefully guarded against chills for some time, and flannel should be worn next the skin.

EDMUND M. SMITH, M.D., D.P.H.,
HEALTH OFFICE, GUILDHALL, YORK. *Medical Officer of Health.*

TABLE K.

YORK EXTENSION AND IMPROVEMENT ACT, 1884.
INFECTIOUS DISEASES (NOTIFICATION) ACTS, 1889 & 1899.

CASES NOTIFIED TO THE SANITARY AUTHORITY IN EACH YEAR, 1893—1903, WITH ATTACK-RATES
PER 1,000 LIVING OF WHOLE POPULATION.

DISEASE.		1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Typhoid Fever	...	287	95	180	101	106	132	134	244	121	56	52
Ditto	(Attack-rate)	4.1	1.3	2.5	1.3	1.4	1.7	1.7	3.2	1.5	0.7	0.65
Scarlet Fever	...	156	108	138	194	270	364	200	325	262	279	287
Ditto	(Attack-rate)	2.2	1.5	1.9	2.6	3.6	4.8	2.6	4.2	3.3	3.5	3.5
Diphtheria	...	30	22	33	20	36	14	28	17	40	32	38
Membranous Croup	...	...	...	...	...	...	...	...	2	0	0	0
Puerperal Fever	...	9	1	3	6	2	4	4	10	3	2	3
Small-pox	...	72	3	0	0	0	4	2	0	1	3	27
Erysipelas	...	...	...	...	...	...	...	...	42	44	64	36

By “ Attack-rate ” is meant the number of persons attacked per 1,000 of the population.

LOCAL GOVERNMENT BOARD'S TABLE III.

CITY OF YORK.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1903.

NOTIFIABLE DISEASE.		Cases Notified in Whole District.							Total Cases notified in each Sub-Registration District:—			Number of cases removed to Hospitals from each Sub-Registration District:—			
		At Ages—Years.							Bootham.	Micklegate.	Walmgate.	Bootham.	Micklegate.	Walmgate.	Totals
		At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards							
Small-pox	...	27	0	2	2	3	18	2	14	6	7	14	6	7	27
Cholera ...	...	0	0	8	12	8	10	0	9	14	15	2	1	1	
Diphtheria	...	38	0												
Membranous Croup	...	0													
Erysipelas	...	36	3	2	3	4	22	2	4	11	21	40	64	68	172
Scarlet Fever	...	287	7	71	163	25	21	0	77	100	110				
Typhus Fever	...	0													
Enteric Fever (Typhoid)	...	52	0	3	11	15	23	0	19	21	12	{ 4	6	2	12
Relapsing Fever	...											{ 0	*2	0	*2
Continued Fever	...	0													
Puerperal Fever	...	3		—	—	2	1	0	1	1	1				
Plague ...	...	0													
Chickenpox	...	243	21	111	106	4	1	0	74	100	69				
Totals	...	686	31	197	297	61	96	4	198	253	235	60	79	78	217

The Isolation Hospital and the Smallpox Hospital (the Bungalow) are both situated in Flaxton Rural District. The Workhouse is situated in Bootham Sub-Registration District * These cases of Enteric Fever were received into York County Hospital (General Hospital).

Scarlet Fever.

During the year 1903, 287 cases were notified, 172 of which were received into the Fever Hospital (see Table III.), or 59.5 per cent.

There were 13 deaths, giving a death-rate of 0.16 per 1,000 (16 per 100,000) living, as compared with the average .06 for the years 1894—1902, and 0.14 for the 76 Great Towns. The case mortality was unusually high, 4.52 per cent., the disease being of rather severer type than in recent years.

SCARLET FEVER, 1893--1903.

Year.	Total cases notified.	Persons attacked per 1,000 of Population.	Total deaths.	Death-rate per 1,000 living.	Mortality per cent. of cases	Total cases removed to Fever Hospital.	Percentage of total cases removed to Hospital.
1893	156	2.2	2	0.028	1.28	6	3.8
1894	108	1.5	2	0.028	1.85	17	15.7
1895	138	1.9	4	0.056	2.90	32	23.2
1896	194	2.6	6	0.082	3.10	62	31.9
1897	270	3.6	1	0.013	0.37	96	35.5
1898	364	4.8	8	0.107	2.20	133	36.5
1899	200	2.6	4	0.052	2.00	105	52.5
1900	325	4.2	8	0.104	2.46	167	51.3
1901	262	3.3	7	0.089	2.67	128	48.8
1902	279	3.5	6	0.075	2.15	137	49.1
1903	287	3.5	13	0.162	4.52	172	59.5

It is a great pleasure to acknowledge the earnest co-operation of the Managers and Teachers of our Public Schools, and of the Managers of some trade establishments, in connection with the work of prevention of Scarlet Fever and of the other infectious diseases. Without their aid the Health Department would find it almost impossible to curtail the prevalence of Scarlet Fever.

The occurrence of Scarlet Fever was distributed through the year as follows:—

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals.
Bootham District	15	17	24	21	77
Micklegate District	21	18	17	44	100
Walmgate District	52	19	19	20	110
	88	54	60	85	287

Copies of the handbill, published in 1900, about this disease, were sent to every affected household, and to neighbours, contacts, and even whole streets.

It has not been necessary to close any of the schools during the year because of Scarlet Fever.

40 cases were received into the City Fever Hospital from Bootham Sub-Registration District, 64 from Micklegate Sub-Registration District, and 68 from Walmgate Sub-Registration District—Total, 172.

Of the 172 cases received into Fever Hospital, 10 afterwards proved to be doubtful cases. They were isolated, kept under observation for about four weeks, and then returned home, after disinfectant bath, etc.

Notwithstanding that 50 to 60 per cent. of Scarlet Fever cases are removed to the Fever Hospital—where there is better nursing and better isolation—yet the disease is vexatiously persistent. This is largely due to the mild character of a large percentage of present day cases; modern sanitation has at least reduced the average virulent capacity of the disease. Consequently numerous mild cases are overlooked, and are sent to school and allowed to mix with healthy persons. But the disease, however mild, is very infectious and so the overlooked mild case leads to the occurrence of several more.

By handbill and warnings to householders, schoolmasters, and others we have strenuously endeavoured to diminish the number of overlooked and neglected cases. There is, however, a deplorable amount of carelessness on the part of parents as to sickness amongst their children.

The total number of probable "return" cases in the City in 1903 was 11, being 3.8 per cent. of total cases of Scarlet Fever notified, or 6.4 per cent. of total city cases received into hospital. Our latter average in previous years was about 3 per cent.

The 115 cases retained at home in York during 1903 gave rise to 28 secondary cases, nearly 9.7 per cent. of the total cases notified, or 24.3 per cent. of the total cases retained at home.

Of the 8 city cases of Scarlet Fever who died in the Fever Hospital, 5 were due to malignant Scarlet Fever, two to accompanying Meningitis, and one to Bronchitis.

Diphtheria and Membranous Croup.

Cases notified in 1897	...	36	;	deaths, 5,	or 13.8	per cent. of cases.
„ „ 1898	...	14	;	„ 2,	or 14.3	„ „
„ „ 1899	...	28	;	„ 4,	or 14.3	„ „
„ „ 1900	...	19	;	„ 6,	or 31.6	„ „
„ „ 1901	...	40	;	„ 3,	or 7.5	„ „
„ „ 1902	...	32	;	„ 7,	or 22	„ „
„ „ 1903	...	38	;	„ 9,	or 23.7	„ „

In some of these cases defects in the drainage arrangements or surroundings of the houses were discovered and dealt with in the usual manner.

The death-rate was 0.11, as compared with 0.09 in 1902, 0.05 for years 1894—1902, and 0.20 for the 76 Great Towns.

The cases in 1903 occurred as follows:—

- 9 of the cases occurred in Bootham District.
- 14 of the cases occurred in Micklegate District.
- 15 of the cases occurred in Walmgate District.

11 in the first quarter of the year; 6 in the second; 8 in the third; 13 in the fourth. (See also Table III.)

All the cases in 1902 were notified as "Diphtheria"; none as Membranous Croup.

The case-mortality in 1902 and 1903 was unusually high; I have no information enabling me to say why.

ENTERIC (TYPHOID) FEVER.

Owing partly, no doubt, to the coolness of the summer and the heavy rainfall we had again a very marked diminution in the prevalence of Typhoid Fever in the year 1903. The Corporation may also reasonably take credit for good results of the active preventive work which they have been carrying on, for I fully believe that we are reaping the benefit of work achieved.

Under the heading "Summer Diarrhœa," the relations of the atmospheric and ground temperatures to the prevalence of that disease are shown. Those facts also have a relation to Typhoid Fever.

Further meteorological particulars will be found at the end of the Report.

During the year 1903, 52 cases of Enteric (Typhoid) Fever were notified. Of these 5 afterwards proved not to be Typhoid Fever—one proving to be Meningitis, one Tuberculosis of Lungs, one Tubercular Disease of the Hip, one General Tuberculosis, and one an indefinite feverish attack.

Of the remaining 47, five died, all at their own homes.

Five, at least, of the remaining cases proved to be very mild or doubtful, and many of the cases in 1903 were of mild type.

The death-rate from Typhoid Fever in 1903 was 0.06 per 1,000 living, or 10.6 per cent. of cases, a very much lower rate of mortality than in previous years.

The average death-rate for the years 1894—1902 in York was 0.24 per 1,000 living, and the average for the 76 Great Towns in 1903 was 0.12.

The attack-rate per 1,000 of the population was 0.58, as compared with 0.7 in 1902, 1.5 in 1901, and 3.2 in 1900.

The following are the statistics for the previous six years:—

Year.	Cases.	Deaths.	Percentage of deaths to cases.	Death-rate per 1,000 living.
1897 ...	106	20	18.8	0.29
1898 ...	132.	17	12.8	0.22
1899 ...	134	26	19.4	0.34
1900 ...	244	38	15.5	0.49
1901 ...	121	15	12.4	0.19
1902 ...	56	12	21.4	0.15
1903 ...	47	5	10.6	0.06

During the first half of the year 1902 (January 1st to June 30th) there occurred 17 cases; during the second half of the year (July 1st to December 31st) there occurred 30 cases.

The age-distribution for the year was as follows:—

	Cases.	Deaths.	Case-Mortality per cent.
Under 5 years of age ...	3	0	0.0
5—15 „ ...	11	2	18.1
15—25 „ ...	15	0	0.0
25—65 „ ...	23	3	13.0
65 „ and upwards	0	0	0.0

There were two Secondary Cases, in one house and family in Micklegate District.

Nine cases (19 per cent.) would appear to have contracted the disease outside the City, having being resident or visiting elsewhere prior to the incubation period of the disease.

CASES NOTIFIED DURING EACH MONTH OF THE YEAR.

January ...	2	} 8 during the quarter.
February ...	1	
March ...	5	
April ...	1	} 9 do. do.
May ...	5	
June ...	3	
July ...	3	} 17 do. do.
August ...	12	
September ...	2	
October ...	4	} 13 do. do.
November ...	7	
December ..	2	

—
47

The 38 cases which originated in York were distributed amongst 36 houses.

Of these 36 houses,

13 possessed **privy middens** (8 of which were abolished)
and 23 water-closets.

Of the 23 **water-closet houses**:—

At 10 the drainage was defective.

At 2 the W.C's were very foul.

At 11 the origin of the cases was inexplicable.

Further details are given in the following notes:—

BOOTHAM SUB-REGISTRATION DISTRICT.

There were 17 true cases of Typhoid Fever in this district.

Of these, three most probably contracted the disease outside the City.

Of the remaining 14 cases, 3 lived in houses where there were privy-middens (one of which, in Scarborough Terrace, was so foul that it was abolished in favour of a water-closet); and 11 at houses where there are water-closets. At 4 of these, the drainage was defective and had to be repaired or entirely reconstructed, and in two of these cases very defective yard surfaces were also re-paved. One water-closet was very foul, and was thoroughly cleansed. At six of the houses no defect was discovered. At one of the privy-midden houses the drainage was defective, and was re-laid.

The 14 cases of Typhoid Fever which originated in this District occurred in the following Streets:—

	Total Houses affected.		Houses with Privy- Middens.		Houses with Water- Closets.
Scarborough Terrace	1	...	1	...	0
Surtees Street	1	...	0	...	1
Grosvenor Terrace	1	...	0	...	1
Marygate	1	...	0	...	1
Marygate, Bean Street	1	...	1	...	0
Gillygate	1	...	0	...	1
Portland Street	1	...	0	...	1
Lowther Street	1	...	0	...	1
Walpole Street	1	...	1	...	0
Little Silver Street	1	...	0	...	1
Swinegate	1	...	0	...	1
King's Square	2	...	0	...	2
Low Ousegate	1	...	0	...	1
	14		3		11

MICKLEGATE SUB-REGISTRATION DISTRICT.

There were 21 true cases of Typhoid Fever in this district.

Of these, 4 very probably contracted the disease outside the City.

Of the remaining 17 cases, six lived in houses where there were privy-middens (four of these were so foul that they were abolished in favour of water closets, and the defective drainage was also re-constructed), and 11 at houses where there are water closets. At five of these the drainage was defective and had to be repaired or entirely re-constructed. At three no defects were discovered. At one house in Charlton Street, where three cases had occurred in previous years, and where three cases now occurred in 1903, there

The 17 cases of Typhoid Fever which originated in the Micklegate Registration Sub-District, occurred in the following Streets:—

WALMGATE REGISTRATION SUB-DISTRICT.

Of these, two contracted the disease outside the city.

And three lived at houses with water closets:—

At another, foul trough-water-closets were substituted by separately flushed water closets.

The seven cases which originated in York occurred in the following streets :—

Fishergate.....	Foul privy-midden abolished.
Wolsley Street	Privy-midden in fair condition.
Hull Road	Water-closet, no defect.
Rymer Street, Latherthorpe	Foul privy-midden abolished.
Garden Street, Groves	Defective water-closet, drainage re-laid.
Lockwood Street, Groves	Foul privy-midden abolished.
Regent Sq., St. Maurice's Road...	Foul trough water-closets abolished.

It will be observed that the only areas particularly affected with Typhoid in 1903 were the Nunnery Lane and Bishophill Districts.

Districts markedly affected but also improved in previous years, viz.:—Newbro' Street, Leeman Road, and Bishophthorpe Road Districts, gave very little trouble in 1903.

No connection was discovered between the cases of 1903 and the City water supply, the City milk supply, or the consumption of oysters or ice-creams.

Special preventive measures re Typhoid Fever :—

1. Twelve cases were received into the Corporation Fever Hospital, and two into the County Hospital (General Infirmary).

2. The special pails for the collection and removal of the excreta of typhoid cases, purchased in August, 1900, served all the cases of 1903 which were not sent into Hospital. They served 30 cases, and largely prevented, therefore, the specific pollution of 30 privies or house drains. The pails were sent out containing carbolised fluid; and the excretal contents were buried in pits, away from houses, mixed with lime and earth. I feel sure that this special system is doing a valuable preventive work, as it is of the highest importance that, as far as possible, privy-middens, and house drains which may be defective, should not be infected.

3. The work of abolition of infected and foul midden-privies progresses steadily.

4. Ice Creams :—

During the summer, samples of ice-cream were analysed chemically and bacteriologically, and ice-cream manufacturers were ordered by the Corporation to discontinue making or selling ice-cream on premises in Layerthorpe, Long Close Lane, Malt Shovel Yard (Walmgate), and Carey's Yard, Hope Street.

5. Typhoid Fever and Oysters :—

In consequence of an important communication from the Fishmongers' Hall (Fisheries Department) I issued the following letter to 23 oyster dealers and fishmongers in York on October 8th, 1903 :—

Health Office, Guildhall, York.

8th October, 1903.

Dear Sir,—It has been found that the waters of the Humber in the vicinity of the oyster beds are grossly polluted with sewage and unfit for the bedding and storage of oysters, and Professor Klein's report on his analyses shows that oysters laid in the Cleethorpes waters are unfit for human consumption.

Under these circumstances, the Fishmongers' Company, in co-operation with the owner of the oyster layings (Lord Yarborough) and the Cleethorpes

Urban District Council, have succeeded in stopping the sale for consumption of any oysters from the Cleethorpes waters.

I am communicating this to you in order that you may avoid receiving oysters which have been laid in Cleethorpes waters (in case any attempt should be made to re-open the trade), as such oysters would be liable to be seized and destroyed as unwholesome food.—Yours faithfully,

EDMUND M. SMITH, Medical Officer of Health.

6. Typhoid-infected Army Blankets from South Africa.

On May 20th, I received a letter from Dr. Collingridge, Medical Officer of Health to the Corporation of London, stating that a large number of Army Blankets from South Africa, many of which it was feared were infected with Typhoid Fever, had been sold by a London firm to various institutions and tradespeople throughout the country. A batch had been sold to a private Institution in York, which I at once visited.

I found that a batch of 12 had been received on February 21st ulto., that two had been re-sold to servants living outside the institution, and that the remainder were in the store-room and had not yet been used. These the Superintendent of the Institution and I inspected. Three or four of them looked so suspiciously soiled that the Superintendent requested me to send for and destroy the whole batch, rather than wash and steam-disinfect them. The batch of 10 were first steamed, and then burned in the Destructor. I had intended making a bacteriological examination of them, but by an oversight they were steamed and burned before I could do so.

The two that had been re-sold had been washed, and were now steam-disinfected and returned to their owners.

We made numerous enquiries of second-hand dealers, drapers and pawn-brokers, of our previous typhoid cases during the year, and of the general public through the local press, but we did not trace any more of the blankets.

The facts were reported to the Local Government Board at their request.

Small-pox.

THE OUTBREAK OF SMALL-POX IN YORK.

The epidemics of Small-pox in London in 1900—01, in the Midlands, in Lancashire, the West Riding, and in the Northern Counties during 1902 and 1903 are within the knowledge of all.

The City of York escaped invasion by this serious and loathsome disease until Christmas week, 1902, when two cases occurred. Another case occurred on January 9th, 1903, and altogether 15 successive invasions occurred during 1903, extending into January, February, and March, 1904.

The appended table shows the extent of prevalence of the disease in the West Riding, and in England and Wales, as a whole, during the period in which York was affected.

As no cases have occurred (July 1st, 1904) since March 15th, 1904, it will be well to review the whole outbreak commencing December 22nd, 1902, and ending March 15th, 1904.

The cases occurred as follows:—

In December, 1902, 2 cases, 1 death.

January 1st to December, 31st, 1903, 27 cases, 5 deaths.

January 1st to March 15th, 1904, 10 cases, 1 death.

Totals for the whole outbreak, 39 cases, 7 deaths.

The cases were distributed in the Sub-Registration Districts as follows:—

		Bootham District.		Micklegate District.		Walmgate District.		Totals.
In 1902	...	1	...	1	...	0	...	2
In 1903	...	*14	...	6	...	7	...	27
In 1904	...	0	...	0	...	10	...	10
								—
								39

* Including 8 cases in the Workhouse.

All the cases were received into the York City Small-pox Hospital (the Bungalow).

The death-rate from Small-pox for the whole city in the year 1903 was 0.06 per 1,000 living (or 18.5 per cent. of cases), as compared with the average 0.0 for the years 1894-1902, and 0.03 for the 76 Great Towns.

In January, 1903, Chicken-pox was added to the list of diseases compulsorily notifiable under the Infectious Diseases Notification Acts, 1889 and 1899, with the consent of the Local Government Board, for a period of six months. This Order was renewed in July, 1903, and again in January, 1904. It proved very advantageous.

Two hundred and thirty-five cases of Chicken-pox were notified by Medical Practitioners to the Medical Officer of Health during the year 1903, and four by householders. This was a highly satisfactory result from a notification point of view. One case of Chicken-pox notified proved to be Small-pox, and that fortunately was discovered early; one case of Chicken-pox was, for a day or two, thought to be Small-pox, and isolated at home as such; and one case of Small-pox treated as Chicken-pox for five days. None of the cases of Small-pox received into the Bungalow proved to be Chicken-pox.

NUMBER OF CASES OF SMALL-POX NOTIFIED DURING THE YEAR 1903.

DISTRICTS.	Four weeks ending 31st January.	Four weeks ending 28th February.	Four weeks ending 28th March.	Four weeks ending 25th April.	Five weeks ending 30th May.	Four weeks ending 27th June.	Four weeks ending 25th July.	Five weeks ending 29th August.	Four weeks ending 26th September.	Five weeks ending 31st October.	Four weeks ending 28th November.	Five weeks ending 2nd January, 1904.	TOTAL FOR YEAR, 1903.	Five weeks ending 30th January, 1904.	Four weeks ending 27th February.	Four weeks ending 26th March.
	182	189	238	186	400	281	177	207	121	75	37	31	2124	62	46	104
WEST RIDING OF YORKSHIRE																
ALL ENGLAND AND WALES, INCLUDING LONDON AND WEST RIDING ... }	1030	1052	1116	1137	1571	811	605	573	412	321	185	293	9106	396	412	588
CITY OF YORK ...	1	3	2	—	1	1	1	1	6	5	1	5	27	5	—	5
TOTAL FOR EACH MONTH ...	1213	1244	1356	1323	1972	1093	783	781	539	401	223	329	11,257	465	458	697

REVIEW OF THE YORK SMALL-POX CASES.

1902 :—I quote the following particulars concerning the cases at Christmas, 1902, from my Annual Report for 1902 :—

Case 1, G.L. December 22nd, male, aged 37, shoeblack outside York Railway Station; he resided at a common lodging-house in Grape Lane. He had not been out of York for over three months; the probable origin of his case appeared to be contact with an infected tramp passing through York. He had never been vaccinated; he was promptly isolated, being the first case in our new Small-pox Hospital, "The Bungalow." His case was a severe confluent one, and he died on January 2nd with hæmorrhage into the pustules. None of the 19 contacts at the lodging-house submitted to re-vaccination, but most of them were detained for from 14 to 17 days and kept under my own observation, and no secondary cases occurred. Those lodgers thrown out of employment by detention received free bed and board during the period of quarantine. Nine persons were re-vaccinated in connection with this case.

Case 2, H.A. December 24th, female, aged 34, residing with her husband in Argyle Street, South Bank. Had been well vaccinated in infancy, but not since then. Her's was a modified case, and she made a rapid recovery. About a fortnight before her illness commenced she had served a tramp at her back door with bread and some clothing. This was the only probable explanation of the origin of her case. Possibly it was the same tramp who gave rise to Case 1. Ten contacts were re-vaccinated and no secondary cases occurred.

1903 :—

Case 3, W.W. On the 9th January another case of Small-pox occurred in Argyle Street, South Bank, next door to case 2. The patient, aged 40, was a Passenger Guard on the N.E.R. Co., and had been working between Doncaster and Newcastle. He was removed to the Bungalow in the early stage of eruption. He had been off work ever since the appearance of the first symptoms. He had not seen Case 2. The 10 "contacts" were re-vaccinated. Nothing had passed between the house of Case 2 and this house, except, per an uninfected boy, a florin, which Case 2 had had nothing to do with however. Whether Case 3 contracted the disease from Case 2 in some mysterious way or other, or from some infected person or things on the railway, is a matter of doubt. I followed up two or three clues, without positive result. He had two excellent vaccination marks of infancy, the vaccination having the effect of distinctly shortening his attack, and even of aborting two of its stages. He made an excellent recovery. Some clothing was destroyed. Some 40 to 50 persons in the neighbourhood got vaccinated or re-vaccinated. No secondary cases followed.

Cases 4 and 5, J.B. and C.B. Brothers, aged 30 and 22, removed from Thackwray's Common Lodging-house, in Walmgate, on February 6th. One case was in the papular stage of the disease, and the other was in the convalescent stage, but not quite free from the infectious scabs of a very mild attack. The patients earned a livelihood as strolling musicians, travelling about from town to town, and from public-house to public-house. They had been travelling in Derbyshire and the West Riding since the beginning of the year, had been in York two nights, and had performed in some four or five public-houses in the City.

Taking into consideration that there were thirty lodgers in the above Common Lodging-house, that the patients had been there two nights, that one of the cases was in the most infectious stage of the disease, and that the patients had circulated amongst a considerable number of people in the City, and also that it was believed that tramps from certain infected quarters had passed through York since Christmas, the Medical Officer of Health recommended that some additional Ward accommodation should be provided at the Bungalow.

After some discussion, the Council resolved to build the extra Ward at the Bungalow, described in the Section on "the Bungalow."

As one of the brothers kept a diary I was able to communicate with the Medical Officers of Health of 15 sanitary districts, through which they had passed during the incubation and infectious periods of their attacks, and in one of which the elder brother must have contracted the disease and afterwards given it to the other. The exact origin could not be traced.

The latter case had been diagnosed the day before by a local druggist as a case of itch.

The elder brother had four good vaccination scars of infancy, and he had a very mild attack; the younger brother had only two scars of infancy, and had a much severer attack.

There were 30 lodger and 6 resident "contacts" at the Common Lodging-house (and numerous other unknown "contacts" in the city no doubt). All the six resident contacts were re-vaccinated, and when we offered bed and board for a week to all those lodgers disabled by vaccination or re-vaccination, no less than 20 submitted to the operation at once. This method was also successful in subsequent lodging-house cases. By paying for beds to all those who answered our Inspector's roll-call at 9 p.m. each day, we succeeded also in retaining nearly all the lodgers at the house for 14 to 17 days' quarantine, and in getting them to submit to a bath and the steam disinfection of their clothes. They were then allowed to follow their employment. No secondary cases followed.

Case 6.—T. L., aged 18, male, removed from the York Union Workhouse to the Small-pox Hospital on February 25th. The patient had been for some months out of regular employment, and usually slept at O'Hara's Common Lodging-house in Walmgate. On the 23rd he was so poorly that he was sent to the Workhouse Infirmary, on the order of the Poor Law Medical Officer. On the morning of the 25th, symptoms of Small-pox appeared, and the case was promptly removed to the Bungalow. He must have become infected between February 5th and 10th. No suspicious cases had been observed at the Lodging-house, but I detained 20 lodgers who had been sleeping there during the three weeks prior to February 22nd until March 1st, four days, so as to be able to observe whether any others amongst them fell ill who might have been infected from the same source. Lodgers who had come in between the 22nd and 25th I did not consider it necessary to detain. His mother said that he was vaccinated in infancy, but he did not bear distinct scars. I was not able to trace any connection between his case and any of the previous cases of Small-pox in York. I think it probable that he was infected by some unknown infected person who had been sleeping at the same Common Lodging-house for one or two nights. He had a modified attack.

Case 7.—J.F., aged 26, male. On February 26th I discovered a lodger at the same Common Lodging-house, feverish and ill. I ordered him to be isolated in a separate bedroom, and on Monday, March 2nd, a slight eruption appeared on face and arms; the patient was forthwith removed to the Bungalow, and his bedroom disinfected. The patient bore splendid vaccination scars of infancy; his face was somewhat "pit-marked," but whether from Small-pox, Chicken-pox, or what else, it was impossible to say; he did not know that he had ever had Small-pox. He was a labourer, out of employment, and had lived in York for some months. I am inclined to think that his illness originated from the same unknown source as the previous case. His was a very mild case.

Case 8.—T.W., male, aged 34, a tramp, received into the Bungalow from the York Union Workhouse, March 4th. He had slept in the Casual Ward of the Workhouse for the night of March 3rd, and his illness was just commencing, the eruption appearing on the morning of the 4th. He had tramped here from Lancashire towns, through Bradford and Leeds. Upon inquiry I found that he must have contracted the disease either at Manchester or Rochdale. He had been well vaccinated in infancy; he had a well-marked attack of Small-pox, but made a good recovery. No secondary cases occurred in York, although there were 21 vagrant contacts.

Case 9.—F.G., widow, aged 51, residing in Guildhall Ward, received into the Bungalow May 12th—after an interval of 10 weeks since the occurrence of the previous case. The patient was a York resident. She had been to Leeds, for the week-end, a fortnight before. I believe she contracted the disease in Leeds, perhaps in a tramcar upon which some infected person was or had been travelling. She had been fairly well vaccinated in infancy. Her two children were re-vaccinated, the house disinfected, and a Public Free Library book destroyed. Her case was a modified one. There were no other contacts except the children, who escaped attack.

Case 10.—E.W., aged 55, male, joiner, removed from a yard in Goodramgate, where he resided alone, on Whit-Monday, June 1st. He had never been vaccinated, and had a confluent attack of Small-pox, but recovered. 22 contacts were re-vaccinated, and no secondary cases occurred. The origin of the case could not be traced; it was probably some unknown infected person passing through York, visiting inns, etc., as several suspects had been heard of from other districts, as having passed through the City.

Case 11.—G.C.B., female, aged 3 years, removed to Bungalow July 7th; had never been vaccinated. The child was very ill, and its complaint was said to have been mistaken for Chicken-pox during the previous day or two by an unqualified practitioner. The patient was again a York citizen. She had been away at an East Coast watering-place during the previous 17 days. The case was a severe discrete one, but recovered with little damage. There were nine contacts in York, one in Scarborough, and one at Stamford (Lincoln), who were all promptly re-vaccinated. No secondary cases followed. It was afterwards learned that four cases of Small-pox had been secreted for about a month in the house of an anti-vaccinationist, on the opposite side of the street in which the above case was staying. Two further cases occurred in the same street. "Trippers" were suspected as the source of the above-mentioned set of four cases. How our York case caught the infection we could not discover. Was it a case of ærial carriage of contagion?

Case 12.—T.J., aged 61, male. On August 26th my attention was called, for the first time, to a suspicious case of Small-pox at the Workhouse. I visited the case, and found it to be an unmistakable case of Small-pox. I had him removed at once to the Bungalow, and disinfection of bedding, etc., carried out, and vaccination of contacts, of whom there were about 30. The patient was a tramp, aged 61, belonging to Bristol, who had been tramping in the West Riding for some weeks as a hawker. It was stated that he had been staying at a Common Lodging-house in Walmgate (O'Hara's), and that he was sent from there into the Workhouse by order of a Relieving Officer. The man had been well vaccinated in infancy, but not since. It was a well marked discrete case, and recovered. Unfortunately this case was not fully diagnosed for five or six days, and although 20 contacts were re-vaccinated, it was too late, and six secondary cases followed in the Workhouse.

Secondary cases in the Workhouse, all males:—

Cases 13 and 14.—The two first contacts were removed on the 5th September. One of the patients, J.C., aged 30, had been vaccinated in infancy, and re-vaccinated after the occurrence of the first of the cases, but too late. His was a very mild case, however. The other patient, C.T., aged 44, had never been vaccinated, and he died on the 14th. His was a very confluent case. He had refused vaccination after Case 12.

Cases 15 and 16.—J.L. and T.G., aged 64 and 70. On Sunday, the 6th September, two more contacts were removed to the Bungalow. They had resided in the Union Workhouse for some time past. Neither of them had ever been vaccinated. T.G. died. He was an old sufferer from chronic rheumatism.

Case 17.—On the 10th September two more contacts were removed to the Bungalow. E.S., aged 73, had resided in the Workhouse two years. There were no vaccination marks to be discovered. The patient died on the 15th. His was a mild case, and he was really dying from senile disease before he was attacked by Small-pox.

Case 18.—J.S., aged 55, a Corporation Stonemason, died on the 16th inst., with hæmorrhage into the pustules. He had been imperfectly vaccinated in infancy, and was a patient in the Workhouse, suffering from the effects of "a stroke," which occurred three months before, when he was attacked by Small-pox.

Case 19.—J.B., a labourer, aged 46, appeared in the Out-patient's room of the York Dispensary on October 3rd. I had him immediately removed to the Bungalow, and 12 out of 17 contacts at the Dispensary were re-vaccinated that day or within the two following days. Three had recently been vaccinated, two declined; all escaped Small-pox. The patient had for some years resided at a Common Lodging-house in Skeldergate, and there were 27 contacts. I immediately closed the Lodging-house against all new comers for 17 days, and kept the contacts there under daily observation. Seventeen of the 27 contacts at the Lodging-house were re-vaccinated. Fifteen other persons who were contacts or possible contacts in the City were also re-vaccinated, and they escaped Small-pox. Disinfection of all known infected places and articles was carried out. The patient did not bear the slightest trace of ever having been vaccinated, and he died on the 9th from a confluent attack. Similar measures were carried out with

regard to lodger contacts as in cases 4 and 5. When discovered he had been ill six days. It was found that there were over 100 contacts in connection with this case. Four secondary cases followed. Of 27 contacts at the Lodging-house, 11 were re-vaccinated within three days, 4 refused until five days afterwards (October 8th), 2 had been recently re-vaccinated, 2 had had Small-pox, 5 refused re-vaccination, 3 "gave us the slip" and left the house.

Case 20.—W.G., aged 31. On October 15th, one of those who would not be re-vaccinated until October 8th developed modified Small-pox, and was forthwith removed to the Bungalow. He had two good scars of infantile vaccination, and recovered. After this case, 59 persons in Skeldergate got re-vaccinated.

Case 21.—G.D., aged 28. On October 22nd, one of the lodgers who refused re-vaccination developed Small-pox, and was also removed. (And on the same day one of those who "gave us the slip," and who had not been re-vaccinated, was discovered in Leeds with Small-pox). He bore no marks of infantile vaccination, and had a severe attack, but recovered. The Common Lodging-house was still closed against new comers.

Case 22.—W.J.S., aged 38. On October 16th, a case occurred opposite the Common Lodging-house in an inn—a very mild case—and it was removed to the Bungalow. Unknown to us he had come into contact with Case 19 about October 1st. He had been well vaccinated in infancy (two good scars), but not since. Seven of his contacts were re-vaccinated.

Case 23.—W.T.T., aged 38. On October 20th another "unknown contact" case occurred, in Walpole Street, a man who had been fairly well vaccinated in infancy (two good scars), but not since. He worked in Bootham Row where Case 19 also worked, and they had met each other about October 1st or 2nd. This case was one of an unknown number of contacts, persons whom Case 19 may have met in street or inn, etc. Case 19 was so ill from the very first that we could get very little information from him about his movements during the days of his preliminary symptoms. This case showed up a serious feature of this outbreak, viz.: a possibly large number of unknown contacts, and in accordance with the instructions of the Committee, I issued warnings, urging vaccination and re-vaccination, to the public in the "Herald" and "Advertiser." In connection with the Walpole Street case, there were 20 contacts, all of whom were re-vaccinated, and about 26 other persons were re-vaccinated in the neighbourhood. No further cases followed.

During the quarantine period at the Lodging-house I paid for beds every night for those who answered roll-call at 9 p.m. Only in two cases did we require to pay for board for two to five days. In connection with cases 19 to 23, inclusive, there were 101 known contacts, and 157 persons were vaccinated or re-vaccinated in Skeldergate, Walpole Street, etc.

Case 24.—L.M., female, aged 38, living in Bright Street, Leeman Road; removed November 26th to the Bungalow. This was a well marked case of Small-pox, and had evidently been suffering from it for about a week. Husband and four children were vaccinated that night; the two youngest, 3 years and 1½ years were not re-vaccinated, as they showed well-marked vaccination scars. Of the 15 other contacts, 9 were re-vaccinated; two were young children, and the others declined re-vaccination. The contacts were kept under close supervision, and no fresh cases occurred. The patient had been vaccinated in infancy, but

showed only a very faint smooth mark an inch across. She made a good recovery. No other clue to the origin of the case than a call from a tramp begging alms could be traced.

Case 25.—F.B., male, aged 16, grocer's errand boy, reported late in the evening of December 10th, residing in Tower Street. This was a well-marked case of mild Small-pox. He had been vaccinated in infancy, and presented two faint scars on the right arm. Of the 10 contacts in the house, three only allowed themselves to be re-vaccinated. The rest had been vaccinated in infancy, except two children, aged 7 and 4 years respectively. Eleven other known contacts were re-vaccinated. There were eleven contacts at the grocer's establishment, and eight were re-vaccinated by the Public Vaccinator. Origin of case suspected to be from one at Fulford. Two secondary cases followed, both residing in the same house in Tower Street.

Case 26.—E.B., female, aged 12. She was a contact of case 25, and had refused to be re-vaccinated. She recovered from a mild attack.

Case 27.—G.B., female, aged 4, on December 26th, secondary to Case 25, making a total of three cases occurring at this house in Tower Street. This patient had never been vaccinated, owing to ill-health, and vaccination was repeatedly refused. The case was not a very severe one of Small-pox, but became complicated with Bronchitis, and death ensued on January 6th, 1904. Then all the unvaccinated inmates were successfully vaccinated, and no further case occurred!

Case 28.—M.G., female, aged 14, occurred in Butler's Buildings, Dennis Street, on December 30th. The case was a well-marked one of Small-pox. She had been vaccinated in infancy. The mother of the patient had been pulling turnips at a farm, at Deighton, for the previous three weeks. Cases of Small-pox had been removed from this farm recently. The six contacts were all re-vaccinated. The patient had a well-marked attack, and recovered. No further cases occurred in connection with this case.

Case 29.—H.C., female, aged 26, removed from No. 50, Dennis Street on December 30th. The source of infection could not be traced. Patient was a packer at a confectionery works in the city, but had not been at work since the 24th December. Seven contacts at a wedding party on the 26th had their clothes disinfected. Nine contacts were re-vaccinated. Patient had been vaccinated (three scars) in infancy she had a severe attack, and recovered. Two secondary cases followed.

Year 1904:—

Case 30.—A.H.R., female, aged 28, removed from No. 46, Dennis Street, on the 8th January, 1904. She had been vaccinated in infancy, and her's was only a mild case of Small-pox. She was a contact of the case No. 29, at No. 50, Dennis Street, but was not re-vaccinated. All her contacts (five) were re-vaccinated.

Case 31.—J.W.C., male, aged 30. This case of Small-pox occurred on January 11th, at No. 44, Dennis Street. The patient was a brother, co-worker, and contact of the case at No. 50, Dennis Street, Case 29. He was re-vaccinated

successfully, but unfortunately it was just about a day too late, and his was a well-marked case of Small-pox. No further cases of Small-pox have since occurred in Dennis Street.

Case 32.—M.A.W., female, aged 5—removed from No. 1, Haver Lane, Hungate, on January 16th, 1904. The patient was an un-vaccinated child, aged 5, and this was her seventh day of the disease. A list of known contacts (about 30 in number) was sent the same day to the Public Vaccinator, and the bulk of them were re-vaccinated. This case originated, it is believed, from the above Dennis Street cases.

Case 33.—A.W., female, aged 32.

Case 34.—M.C., female, aged 15. These two cases of Small-pox occurred at No. 1, Haver Lane, on the 25th and 26th January, 1904. Both these patients were contacts of the previous case (Case 32), which occurred on the 16th January. Both had been re-vaccinated, but they had already been too long in contact with the previous case, and both had mild attacks of Small-pox, and recovered. The house was again disinfected, and no fresh cases occurred. Case 33 had three fair marks of infantile vaccination; Case 34 none.

Case 35.—J.H., male, aged 48, removed from No. 3, Providence Place, Margaret Street, on February 29th, 1904. Patient was a "striker" at the railway, and his was a well-marked case of Small-pox. He presented no distinct vaccination marks. Ten contacts were re-vaccinated. The infection was most likely carried from the previous outbreak in Dennis Street (Cases 29—31), probably through a relation of his living at No. 1, Providence Place.

Case 36.—H.F., male, aged 24, flour miller.

Case 37.—G.P.R., male, aged 24, flour packer. These two cases of Small-pox occurred at No. 1, Providence Place, Margaret Street, on the 3rd March, 1904. Both were mild cases; one extremely mild, he having been re-vaccinated seven years ago. They had both refused re-vaccination at the Flour Mills two months before. A list of 47 contacts was sent to Public Vaccinator. The infection here was no doubt derived from a similar source to that of Case 35. Case 36 had three scars of infantile vaccination. Case 37 had three small scars of vaccination. Two secondary cases followed.

Case 38.—E.R., female, aged 48, removed to Hospital late on Saturday night, March 12th, from Stewart's Yard, Fitzroy Terrace. She had no vaccination marks. This was a well-marked case, but recovered. She was the mother of Case 37, and was a contact. She had refused re-vaccination. About 10 contacts were re-vaccinated.

Case 39.—J.F., aged 23, male, flour miller, removed from Dundas Place, Dundas Street, Hungate, on March 15th. He showed three large vaccination marks of infancy. He had refused re-vaccination a short time before. His was a very mild case indeed. He was a brother and indirect contact of Case 36. Three contacts were re-vaccinated.

With this batch of cases the Outbreak of Small-pox 1902—04 terminated.

The following special measures of suppression and prevention were carried out during the epidemic:—

ISOLATION.

Prompt removal of all cases to Isolation Hospital.

DISINFECTION.

Steam disinfection of infected bedding, clothing, etc. Some things were sprayed with formalin and others destroyed—burned.

Wall-papers of infected rooms were soaked with Corrosive Sublimate Solution, and stripped, and the walls and ceilings lime-washed or colour-washed afterwards.

Furniture, woodwork, etc., was washed with Corrosive Sublimate or Chloros.

In short, every effort was made thoroughly to disinfect everything infected, or possibly infected, with a reliable disinfectant, and for things damaged or destroyed the owners were usually compensated.

CONTACTS.

Diligent inquiries were made for all persons who had been in direct or indirect contact with each Small-pox case, the clothing of contacts was disinfected, and the contacts were given the use of the bath at the Corporation Disinfecting house, wherever necessary.

RE-VACCINATION.

Lists of contacts were at once sent to the Public Vaccinator, who succeeded in vaccinating, or re-vaccinating a large number of contacts and other citizens.

Every effort was made by personal persuasion, by handbill, and even by compensation for temporary disablement, to induce contacts to get vaccinated or re-vaccinated by the Public Vaccinator or by their own doctor.

At two or three lodging-houses our undertaking to pay for bed and board if disabled for a few days by vaccination disarmed all further opposition, and we had to pay only in a very few cases.

Sometimes I, or my deputy, seized "the psychological moment" and vaccinated a waverer on the spot.

In several instances contacts or suspects whose work it was deemed advisable to suspend for a few days, were compensated for loss of wages, and at some of the infected houses stripped wall-paper was also compensated for.

At the affected common lodging-houses the owners were requested to close the house against all new-comers for a period of seventeen days, and were compensated as far as possible for any loss sustained thereby. Lodgers who had had their clothes disinfected, and had had a bath, were as a rule allowed to continue their employment.

During the outbreak many hundreds of visits of inquiry to contacts, etc., were paid by myself and Inspectors. We were too busy to keep account of the exact number.

Upon the request of medical practitioners, and in some instances of householders where no doctor was in attendance, I also visited and examined numerous suspicious or doubtful cases of disease. The cases thus in doubt proved to be one or other of the following diseases:—Chicken-pox, Measles, Turpentine Rash, Erythema Nodosum, Accidental Vaccinia, Scabies (Itch).

That York was very fortunate in escaping with so few cases may be inferred from the fact that during the epidemic I received numerous communications from other Medical Officers of Health informing me of:—

Cases of Small-pox which had fallen ill in their districts, but which had passed through York during the incubation period or early stage of the disease, and had stayed in York one or more nights.

These cases had fallen ill at:—Leeds (5 separate cases), Huddersfield, Stockton-on-Tees, Knaresbro', Bradford, Wakefield.

In connection with one of the Leeds cases 14 persons were re-vaccinated in York.

I also heard of 11 contacts (tramps) of Leeds cases who had departed, they said, for York, and contacts of Bradford and Liverpool cases who had come on to York.

Also, at least 8 York citizens were contacts of cases in other towns.

Regarding several of these instances, I sent lists of contacts and other information to the Master and Medical Officer of the York Union Workhouse for their guidance and warning.

With the consent of the Committee I wrote letters to the local press, calling the attention of householders to their duty under the law to report all cases of Chicken-pox, suspected Small-pox, or other infectious diseases to me, whether they were being attended by a doctor or not, and I pointed out how the poor could obtain free medical diagnosis and advice at the Dispensary, etc.

On several occasions we asked through the local press that contacts we had not been able to hear of, and so communicate with, would report themselves to me and seek our advice and help.

The October outbreak in Skeldergate seemed so threatening that I wrote to the papers as below, and we issued the following handbills to the houses in the affected districts, and to numerous other persons concerned.

On several occasions my communications to the Press resulted in our hearing of unknown contacts, whom we could then advise and help, and in impelling persons to apply for vaccination and re-vaccination.

The handbill No. 1 was also published as an advertisement in two of the local papers, one a free paper with a circulation of 13,000 per week.

SMALL-POX IN YORK.

(TO THE EDITOR OF THE "YORKSHIRE HERALD.")

Sir,—A case of small-pox (a man named Joseph Buckley) occurred, as you have already reported, in a lodging-house in Skeldergate on October 3rd.

The patient had been ill four or five days, and before he was discovered to have small-pox, he had come into contact, directly or indirectly, with over eighty persons, possibly over one hundred, in York.

The course of the disease rapidly developed after his removal to the Small-pox Hospital, and he died there on October 8th. He had never been vaccinated. He was so ill from the very first that it was impossible to obtain much information from him about his movements during the four or five days of his preliminary symptoms. Every effort has been made by the Sanitary Department to get to know of all the contacts, and to get them vaccinated or re-vaccinated. Seventeen persons at the lodging-house were re-vaccinated; only five refused re-vaccination, and one of those has developed small-pox to-day, and gone to hospital.

All the occupants of the lodging-house have been kept under observation, and the house was closed against all new comers. Only two secondary cases have occurred at the lodging-house. One had refused re-vaccination, as I have already said, and the other would not be re-vaccinated until five days too late. He is now suffering from a distinct, but modified attack of small-pox. Had he been vaccinated within three days of the occurrence of the first case, as he was urged, he would have escaped the attack of small-pox.

Thirty out of some forty other contacts also submitted to re-vaccination, and they are keeping quite well. Another case occurred (unre-vaccinated) in Skeldergate district, outside the lodging-house, and a case (also unre-vaccinated) has occurred in Walpole Street this week, as already reported in your columns.

The Walpole Street patient is one of some "contacts" of Buckley's case, whom we have found it impossible to trace, as they were unknown persons whom he had met with at public-houses and in the streets, etc.

This constitutes a serious feature of the present outbreak, viz. :—That there are some contacts of Buckley's case whom it has been impossible to hear of. I should be glad to see them at this office for inspection.

Since last Christmastide, we have now had twenty-three cases of small-pox in the city, and it is a remarkable fact that of that twenty-three, six of the patients have been York persons, who have contracted the disease from some "unknown infected" person who has passed through York, and perhaps stayed a night or two in the city.

It is, therefore, clear that you don't know whom you may meet with in city life, in railway trains, etc. This is a very important fact which cannot be safely ignored. As all your readers know, a great small-pox epidemic has swept over Lancashire and the West Riding of Yorkshire during the last twelve months. That epidemic undoubtedly had its origin from the London epidemic of the winter 1901—2. That epidemic of the West Riding has been steadily subsiding during the last few weeks, but there are grave fears that it may revive again when the cold mid-winter weather arrives.

There is a popular delusion that cold frosty weather antagonises small-pox. It does nothing of the kind, but the contrary, because it compels all the poor tramping, homeless populations, amongst whom the disease lingers, and by whom it is disseminated, to take refuge in workhouses and common lodging-houses, and in crowded tenements. Hence the possibility of the revival of the epidemic this winter.

But I want to impress your readers with this fact—that this epidemic could not possibly revive during this coming winter "if" every person who has never been vaccinated were at once vaccinated, and if every person over the age of ten years, who has not been re-vaccinated during the last five years, were forthwith re-vaccinated.

If populations consisted entirely, or almost entirely, of recently vaccinated or re-vaccinated persons, it would be impossible for small-pox to revive or to gain any headway. On the other hand it would soon die out. Vaccination is the only preventive against small-pox yet known to science, and people might as well talk about the earth being flat, or there being no law of gravitation, as talk about vaccination being of no value. Those persons have never had to doctor it or nurse it. They have never known what it is to go amongst the disease with the charmed life that vaccination confers. They have never seen the difference between small-pox in a vaccinated person and in a person who has never been

vaccinated. Cases of small-pox in persons of middle life who have never been vaccinated since infancy are often wonderfully mild. Re-vaccination during previous five or six years absolutely protects against an attack of small-pox, whereas, on the other hand, small-pox in persons who have never been vaccinated is one of the most terrible, loathsome, damaging, and fatal of all the diseases known to man. Of twenty-one contacts in the recent York Workhouse outbreak, only one refused re-vaccination. He developed small-pox, and as he had never been vaccinated, he died of it. It is important to remember that small-pox, whether mild or severe, in the vaccinated or the un-vaccinated, is an extraordinarily infectious disease.

I write this letter with the approval of the Chairman of the Health Committee, urging all citizens to get themselves vaccinated or re-vaccinated without delay.

Vaccination is now an exceedingly simple, safe, and painless operation. Pure glycerinated calf-lymph is now within the reach of every medical practitioner, and those who cannot afford to pay can readily get vaccinated, either at his surgery or at their own homes, upon application to the public vaccinator, Mr. W. Hood, Castlegate, who uses nothing but Government calf-lymph.

EDMUND M. SMITH, Medical Officer of Health,

22nd October, 1903.

M.D., Edin., D.P.H., Camb.

COPY OF HANDBILL No. 1.

CITY OF YORK.—SMALL-POX.

Small-pox is one of the most terrible diseases known to man. In persons who have never been vaccinated it is frequently fatal or leaves heart disease, blindness, deafness, "pitting" of the face, etc.

It is not produced by filth, foul drains, etc., but spreads from an infected person or his clothing to susceptible persons, that is persons insufficiently vaccinated.

The one and only thing that will prevent a person taking Small-pox is being thoroughly and recently vaccinated.

Persons who have been vaccinated in infancy are not absolutely safe against Small-pox after ten years of age, although infantile vaccination greatly diminishes the severity of an attack even in middle age or old age.

All infants who have not been vaccinated should be vaccinated immediately.

All persons over the age of ten should be re-vaccinated at once. I urge this strongly upon all my fellow-citizens, as at the present time it is possible to come into contact with some infected unknown person who may be tramping from the West Riding through York northwards.

It is exceedingly foolish for persons to travel by railway at the present time, unless they have been re-vaccinated during the last five or six years.

Re-vaccination absolutely protects against an attack of Small-pox.

There is absolutely no doubt about the value of vaccination. This is the over-whelming testimony of all those medical men and nurses who have had the management of a variety of cases in a Small-pox Hospital.

Free vaccination, with pure Government Calf Lymph, may be obtained upon application to the Public Vaccinator, Dr. Hood, Castlegate, either at his residence, or at your own home if you request him to call.

Vaccination is an extremely simple and painless operation.

The first symptoms of Small-pox are headache, backache, shivering, vomiting, and perhaps pains in the stomach; the spots appear on face, limbs and body about the third or fourth day of these symptoms.

Notice is hereby given, that any person who, while suffering from Small-pox, Scarlet Fever, Chicken-pox, or other dangerous infectious disorder, exposes himself in any street, public place, shop, inn, or public conveyance; and also any person who, being in charge of any other person so suffering, exposes such sufferer in school or other places, aforesaid, will be prosecuted. The Penalty is £5.

The head of the family, or the nearest relative, or the person in charge of an infectious case, or the occupier of the house, must report the case immediately to me at this Office, whether a doctor is in attendance or not, under Penalty of Forty Shillings.

On behalf of the Health Committee,

EDMUND M. SMITH, M.D., D.P.H.,

Medical Officer of Health.

Health Office, Guildhall.

Copy of handbill distributed to contacts.

SMALL-POX.—NOTICE.

Any person suffering from headache, backache, pains in the stomach, or vomiting, or who has any spots coming out on the face, limbs, or body, must send word about it immediately to me at this Office; or consult their own doctor at once.

There is a heavy penalty for anyone hiding infectious disease.

Vaccination is the only thing that will prevent Small-pox. It is a very simple, painless operation. You can get free vaccination with Government Calf Lymph at Dr. Hood's, Castlegate, from 9 to 10 a.m., 2 to 3 p.m., or 7 to 8 p.m.

EDMUND M. SMITH, M.D., D.P.H.,

Medical Officer of Health.

Health Office, Guildhall, York.

SMALL-POX EPIDEMICS AND TRAMPS.

The following is a revised abstract of notes I wrote on this subject in the Spring of 1903:—

In the present outbreak of Small-pox in this City, four of the cases that have occurred were tramps (three from the West Riding and one from Lancashire) and nine (with about 13 secondary cases) have most probably originated from infected tramps.

In 1888, five cases occurred in York. I believe they were all tramps.

In 1893, seventy-two cases occurred; most of these cases were either tramps or were due to infection from tramps.

The same is to be said for three cases in 1894.

In 1898, there was a case probably due to infection from a tramp.

In 1899, two cases occurred in the City, both tramps. One from Hull during the epidemic there, and one from the West Riding.

In 1901, a case was received into our Fever Hospital from Earswick Village. It was thought most probable that he had come into contact with an infected tramp passing to or from Hull.

Our measures with regard to the prevention of Small-pox amongst tramps may be summarised as follows:—

When a case occurred in a Common Lodging-house, we tried to detain all lodgers in that house for seventeen days. Although we have no power to detain them, we have been very successful in doing so. We did not stop their employment unless particularly risky.

We have paid for bed and board (at two shillings per day) of those who wished to leave the City who could not obtain employment, and whom we desired to retain. All who were detained were kept under medical observation during the seventeen days. Those who submitted to re-vaccination were allowed to leave the City as soon as the vaccination had proved to be successful, and after they had had a bath and had had their clothing disinfected. We endeavoured to secure the disinfection of the clothes of every lodger.

The lodging-house was closed to all new comers during the seventeen days' quarantine.

I learn from Dr. Cameron, Medical Officer of Health for Leeds, that their method is to pay for the beds of the whole of the persons using the Lodging-house who return and answer their nightly roll-call. They also close the Lodging-house against all new comers.

They do not stop the employment of anyone, so long as he is free from the symptoms of Small-pox.

At the York Union Workhouse, vagrants were not admitted beyond the Casual Ward, until they had been inspected by the Workhouse Medical Officer who called every night and morning.

When a case occurred at the Workhouse, names and particulars of all vagrants who slept in the Casual Ward the same night as the case occurred, were sent by me to the Medical Officers of Health of those places to which the vagrants said they were going.

When a tramp falls ill from Small-pox in this City, I ascertain from him particulars as to where he has slept every night during the previous three weeks, and I send a copy of those particulars to the Medical Officers of Health of the towns and other places he has visited.

These are the measures largely carried out I believe in all other towns, but it is evident from the continuance of the epidemic, that they are not sufficient to stop it.

It seems to me what we want further is the power for all the authorities in the affected areas to detain simultaneously on a fixed day or during a fixed week, all the tramps then residing in the Common Lodging-houses, and in the vagrant wards of the Workhouses, to give them disinfectant baths, to disinfect their clothing during the bath, and either to compel them to be re-vaccinated under penalty of imprisonment, or to detain them for three weeks, or we should compensate them for loss of employment during the period that the vaccinated arm is too painful to work with.

If such a movement as this, drastic as it may seem, were carried out simultaneously by all these authorities, I feel convinced that we should nearly if not wholly stamp out an epidemic within three or at most four weeks.

The epidemic has been kept up by tramps undoubtedly. They form a very difficult community to work with. That they should have the power to decline to submit to the one well-established remedy, and so cause such enormous expense, trouble, and anxiety to Sanitary and Workhouse Authorities, is monstrous, but I thoroughly believe from my experience of the outbreak that many of these people will submit to re-vaccination with very little persuasion, if they are compensated for loss of employment if disabled by the successful operation. I feel convinced that it is from the fear of losing their work through a painful arm that so many of these people decline re-vaccination.

If, however, re-vaccination cannot be made compulsory, even amongst tramps, then I think we certainly ought to disarm their fears with regard to submitting to the operation.

I know that when lodgers have been detained so that they did not leave the town, and where they have been compensated for loss of employment on the condition that they would submit to re-vaccination immediately, and get over the painful part of it during the quarantine period, they have submitted to re-vaccination at once without any further bother.

On June 11th the Health Committee considered resolutions regarding the prevention of Small-pox adopted by the Health Committee of the Corporation of Huddersfield, and the resolutions were adopted by this Committee, in a somewhat altered form, as follows:—

(1) That in the opinion of this Committee it is necessary for the successful limitation of the spread of Small-pox that Sanitary Authorities should have the power compulsorily to isolate, during the incubation period of the disease, all persons who have been exposed to the infection thereof, and, further, that it should be made an offence to withhold information or give false information in respect to cases of Small-pox.

(2) That a copy of the foregoing Resolution be sent to the President of the Local Government Board and the City Members.

THE HISTORY OF THE YORK CASES OF SMALL-POX IN THEIR RELATION TO VACCINATION AND RE-VACCINATION.

The term “discrete” means that the pocks were separated from each other by normal skin.

The term “confluent” is used when the pocks on the face run together.

“Hæmorrhagic” when there is hæmorrhage into the pocks.

“Modified” when the case is of the abortive type seen only in vaccinated persons.

No. of cases.	Age.	No. and character of scars of Infantile Vaccination.	If ever re-vaccinated.				Character of attack of Small-pox.	Result of attack of Small-pox.
1	37	nil.	no	...	...	...	confluent and hæmorrhagic	fatal
2	34	3 good scars...	no	...	...	...	modified	recovered
3	40	2 good scars...	no	...	...	...	modified	recovered
4	30	4 good scars...	no	...	...	...	very mild	recovered
5	22	2 fair scars ...	no	...	...	...	fairly severe	recovered
6	18	none distinct ..	no	...	...	...	mild	recovered
7	26	4 good scars...	no	...	...	...	very mild	recovered
8	34	2 good scars...	no	...	...	...	moderate	recovered
9	51	3 good scars...	no	...	...	...	modified	recovered
10	55	nil.	no	...	...	...	severe confluent	recovered
11	3	unvaccinated..	—————				severe discrete	recovered ; pitmarked
12	61	3 fair scars ...	no	...	...	...	severe discrete	recovered
13	44	nil.	refused	...	...	..	very severe confluent	fatal
14	30	2 small scars ..	Yes, 5 days after being infected				very mild	recovered
15	64	unvaccinated ..	—————				very severe	recovered
16	70	unvaccinated..	—————				very severe	fatal

No. of cases.	Age.	No. and character of scars of Infantile Vaccination.	If ever re-vaccinated.			Character of attack of Small-pox.	Result of attack of Small-pox.
17	73	nil.	—————			moderate ...	died of senile decay and smallpox
18	55	2 faint small scars ...	no	...	...	very severe hæmorrhagic	fatal
19	46	nil.	—————			severe confluent	
20	31	2 good scars...	re-vaccinated 5 days after infection ...			modified ...	recovered
21	28	nil.	refused	...	...	rather severe...	recovered
22	38	2 good scars...	no	...	...	very mild ...	recovered
23	38	2 good scars...	no	...	...	moderate ...	recovered
24	38	1 faint scar ...	no	...	...	rather severe discrete ...	recovered
25	16	2 faint scars ...	no	...	...	mild ...	recovered
26	12	3 good scars...	refused	...	...	mild ...	recovered
27	4	unvaccinated..	refused	...	...	severe ...	fatal
28	14	4 fair scars ...	no	...	...	moderate ...	recovered
29	26	3 fair scars ...	no	...	...	severe ...	recovered
30	28	2 good scars..	refused	...	...	mild ...	recovered
31	30	3 fair scars ...	Yes, about a day too late after being infected ...			moderate ...	recovered
32	5	unvaccinated..	—————			severe ...	recovered
33	32	3 good scars...	Yes, 7 days too late			very mild ...	recovered
34	15	2 good scars...	ditto.	...	...	mild ..	recovered
35	48	2 faint scars ...	no	...	...	rather severe...	recovered
36	24	3 good scars...	refused	...	...	mild ...	recovered
37	24	3 small scars..	7 years ago			very mild ...	recovered
38	48	nil.	refused	...	...	severe ...	recovered
39	23	3 good scars...	refused	...	...	very mild ...	recovered

The above facts have been carefully and accurately compiled, and I think they speak for themselves in support of the conclusions of modern vaccinationists.

The cases have been especially interesting as showing how necessary it is for re-vaccination of contacts to be prompt, and how disastrous is delay.

That some of the totally unvaccinated or indifferently vaccinated patients recovered, thanks are largely due to the skill of modern nursing and the other hospital advantages.

COSTS OF THE SMALL-POX OUTBREAK.

As the Small-pox Hospital is worked, provisioned and staffed as a branch of the Fever Hospital, it is impossible to give an exact account of the cost of the outbreak, but the nett total working expenditure—permanent charges on the Bungalow, such as interest, sinking fund, rates, etc., not being included, as they go on whether there is Small-pox or not—after deducting the amount received from Eserick Rural District Council for eight cases received into the Bungalow from their district, was £239 14s. od. This nett total is approximately correct

...£239 14 0
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To that we may add:—

Cost of extra ward necessitated by outbreak	...	531	0	0
Repairs and additions to buildings, ditto	...	40	14	0
Extra beds and bedding	ditto	...	50	0 0
<hr/>				
		£861	8	0
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The total working cost, £239 14s. averages out at nearly £6 3s. od. per head for each of the City patients.

DEATHS DUE TO BRONCHITIS, PNEUMONIA, AND PLEURISY.

In 1897, 192 were registered, or 2.6 per 1,000 living.

In 1898, 224 were registered, or 3.0 per 1,000 living.

In 1899, 188 were registered, or 2.5 per 1,000 living.

In Table IV., Bronchitis and Pneumonia only are now classed together, i.e., Acute Bronchitis, Chronic Bronchitis, Lobar (Croupous) Pneumonia, and Lobular (Broncho-) Pneumonia; Pleurisy and other diseases of the respiratory organs, exclusive of Phthisis, from which there are only a very few deaths annually, are now classed amongst "all other causes."

From Bronchitis and Pneumonia in 1903 there were 204 deaths registered, or 2.5 per 1,000 living, or 15.6 per cent. of total deaths from all diseases.

In 1900, 242 deaths, or 3.2 per 1,000 living, or 15.4 per cent of total deaths.

In 1901, 151 deaths, or 1.9 per 1,000 living, or 11.6 per cent. of total deaths.

In 1902, 187 deaths, or 2.3 per 1,000 living, or 15.3 per cent. of total deaths,

The deaths from Pneumonia and Bronchitis in 1903 occurred as follows:—

1st Quarter	...	37	3rd Quarter	...	19
2nd Quarter	...	36	4th Quarter	...	112

Their distribution in districts and in age-periods is shown in Table IV.

TUBERCULOSIS.

In view of the great campaign against Tuberculosis, promoted during the past five years, it is exceedingly interesting and satisfactory to be able to record a diminishing death-rate in connection with Phthisis and other tubercular diseases; it greatly encourages perseverance in the campaign.

Deaths due to Tuberculosis of Lungs.

(Phthisis Pulmonalis or “Consumption” of the Lungs).

In 1903 there were 98 deaths due to Phthisis,
a death-rate of 1.22 per 1,000 living (122 per 100,000);
or 7.5 per cent. of total deaths from all diseases.

They occurred during the year as follows:—

1st Quarter	...	25	3rd Quarter	...	20
2nd Quarter	...	18	4th Quarter	...	35

Phthisis.—Comparison with Previous Years.

Year.	Number of Deaths.		Death-rate per 1000, living.		Death-rate per 100,000 living.		Percentage of Total Number of Deaths from all Diseases.
1897	...	102	...	1.38	...	138	7.5
1898	...	121	...	1.68	...	168	8.6
1899	...	103	...	1.40	...	140	7.8
1900	...	110	...	1.48	...	148	7.0
1901	...	109	...	1.39	...	139	8.4
1902	...	100	...	1.26	...	126	8.2
1903	...	98	...	1.22	...	122	7.5

47 (nearly 50 per cent.) of the deaths in 1903 occurred in Walmgate Sub-Registration District; 21 occurred in Bootham District, and 30 in Micklegate District.

Death-rates per 1,000 living:—

Bootham District	...	...	0.94 (94 per 100,000).
Micklegate „	...	...	1.12 (112 per 100,000).
Walmgate „	...	...	1.49 (149 per 100,000).

Deaths due to other forms of Tuberculosis.

* TUBERCULAR MENINGITIS, TUBERCULAR ENTERITIS, TABES MESENTERICA, “ACUTE MILIARY” AND “GENERAL TUBERCULOSIS.”

Year.	Number of Deaths.		Per 1,000 living.	Tubercular Meningitis only; Number of Deaths.				
1898	...	45	...	0.61	...	61	...	—
1899	...	59	...	0.80	...	80	...	—
1900	...	46	...	0.62	...	62	...	20
1901	...	38	...	0.48	...	48	...	11
1902	...	50	...	0.63	...	63	...	29
1903	..	35	...	0.43	...	43	...	17

Deaths due to all forms of Tuberculosis in 1903.

	Bootham Sub- Registration District.	Micklegate Sub- Registration District.	Walmgate Sub- Registration District.	Totals.			
Phthisis	21	...	30	...	47	...	98
Tubercular Meningitis	4	...	6	...	7	...	17
Other forms of Tuberculosis	5	...	9	...	4	...	18
	30	...	45	...	58	...	133

Total Tuberculosis death-rate per 1,000 living in each district	}	1.35	...	1.69	...	1.85	...	1.65

* Tubercular Meningitis is tubercular disease of the membranes of the brain.

Tubercular Enteritis is tubercular inflammation of the intestine.

Tabes Mesenterica is tubercular disease of the mesenteric glands in the abdominal cavity.

The other terms relate to the distribution of tubercular disease.

The total of 133 deaths was equivalent to a death-rate of 1.65 per 1,000 living (165 per 100,000), and constituted 10.2 per cent. of total deaths from all diseases.

Year.	Phthisis.	Other Tubercular Diseases.	Total.	Death-rate per 1,000 living.	Death-rate per 100,000 living.
1898	... 121	... 45	... 166	... 2.29	... 229
1899	... 103	... 59	... 162	... 2.20	... 220
1900	... 110	... 46	... 156	... 2.10	... 210
1901	... 109	... 38	... 147	... 1.88	... 188
1902	... 100	... 50	... 150	... 1.88	... 188
1903	... 98	... 35	... 133	... 1.65	... 165

Investigations in Cases of Phthisis during the year 1903.

With the beginning of the year 1902 we commenced the system of voluntary notification of Phthisis-with-expectoration.

In 1902, 66 distinct cases were notified during life; and 51 per Sub-Registrar's death returns; and a total of 115 investigations were made.

During the year 1903, 35 distinct cases were notified during life by the medical practitioners, and 71 cases per the Sub-Registrar's death returns.

Of the total 106 cases which thus came to the knowledge of the Medical Officer of Health during the year, 90 were more or less fully investigated; 16 could not be fully investigated owing to the absence of informants.

Of the 16 not investigated, 10 died in the Union Workhouse, 2 in the County Hospital, 1 in Bootham Asylum; in two cases the occupier had left the house before inspection and could not be traced, and in one case investigation was not permitted. In only two cases was inquiry positively resented.

Altogether, 12 cases died in the Workhouse; in only two could full information be obtained. One investigated case died in the City Fever Hospital, following an attack of enteric fever.

Of the 35 cases notified, 17 died within the same year and 5 have died in the early months of 1904.

Specimens of sputum were examined for the presence of Tubercle Bacilli by the Medical Officer of Health in 15 cases, 12 with positive and 3 with negative result.

Only two positive examinations were intimated by the notifying practitioners.

Ages :—Of the total of 106 cases, 59 were males and 47 females.

5	were at ages under 5 years.	
10	at ages 5 to 15 years.	
18	at 15 to 25.	
17	at 25 to 30.	} 70 at 25 to 65.
13	at 30 to 35.	
22	at 35 to 45.	
10	at 45 to 55.	
8	at 55 to 65.	
3	at ages over 65.	

The Question of Heredity :—

In 3 cases one of the parents had died of Phthisis in the same house; in 12 one or both parents had died of Phthisis in other houses than the one now under notice.

In 6 cases one of the grand-parents had died of Phthisis. So that only 21 of the 90 cases inquired into were influenced by the possible inheritance of tubercular predisposition.

In 15 cases uncle or aunt was said to have died of Phthisis, and in 3 cases cousins.

Isolation :—

38 cases occupied a separate bedroom, and 20 slept in a separate bed in a room occupied by others.

In 35 cases the patient slept in the same bed with others, in 16 the bedmate being husband or wife, with whom in two instances also slept a child.

At three of the houses there was decided over-crowding; and at 15 there were too many occupants in proportion to the number and size of the bedrooms, taking into consideration that there was a case of Phthisis in the house.

The cases of overcrowding were dealt with as far as possible under the circumstances.

Family Infection :—

In three cases brother or sister had died of Phthisis *in the same house* ; in two houses children had previously perished of the disease, and at one the husband.

In 17 cases brother or sister had died of Phthisis at other houses than the one now concerned.

In some cases there were **features of special interest** bearing upon the communicability of the disease, and the need for supervision, advice, disinfection, etc., in these cases :—

In one case three brothers and a sister had previously died of Phthisis in the same house.

In another case a mother died in the Workhouse from Phthisis ; one of her children had died of it the week before, and another of whooping-cough the week before that.

In eight cases other members of the family were now said to be “consumptive,” father, daughter, brother or sister.

There were 27 cases in which the patient had resided in two or three different houses during the course of the disease. Probably more than 60 houses had therefore been infected by these cases.

Length of Illness :—

Statements by the patient's friends upon this point are obviously vague in respect of such an insidious and often prolonged disease, but the following may be quoted for what they are worth, as they mark the variable length of the course of the disease and the frequently protracted period of infection, a very serious and difficult feature in preventive work. Twenty-four cases are said to have been pronounced for three months, 11 for three to six months, 19 for a year, 14 had lasted about two years, and 22 for three or more years.

Occupations :—

Nine of the cases were children, seven of whom had been attending school, 24 were women engaged in housework, two were female domestic servants. The occupations of the remainder were stated as follows :—

Tailors	...	..	...	2	Joiners...	...	...	...	3
Laundress	...	...	...	1	Plumbers	...	...	...	2
Comb-Maker	...	...	...	1	Clerks	...	...	...	3
Blacksmiths	...	...	...	2	Painters	..	...	...	2
Innkeepers	...	...	...	2	Railway Labourer	...	...	...	1
Stonemasons	...	...	...	3	Outdoor Porter...	...	...	...	1
Coal Dealers	..	...	...	2	Paperhanger...	...	...	...	1
Machinists	...	...	...	4	Upholsteress	...	...	...	1
Cocoa Workers...	...	...	...	2	Road Sweeper...	...	...	...	1
Labourers	...	...	...	4	Cattle Drover	...	...	...	1
Soldiers...	...	...	...	4	Bargeman	...	...	...	1
Dressmakers	...	..	...	2	Fellmonger	...	...	...	1
Cabdriver	...	...	...	1	Carter...	....	...	...	1
Ex-Policeman	...	...	...	1	Optician...	...	...	...	1
Asylum Attendant	...	...	...	1	Charwoman	...	...	...	1
Compositor	...	...	...	1	Flourman	...	...	...	1
Workers in a refrigerator room				2					

Distribution of Cases in the City:—

The 106 cases and deaths were distributed in the Sub-Registration Districts as follows:—

Bootham District	...	...	22
Micklegate District	...	...	29
Walmgate District	...	...	55

And in smaller districts and in streets as follows:—

GROVES DISTRICT:—

Abbott Street.
Garden Street (4 cases).
Groves Place.
Newbeggin Street.
Penley's Grove Street.
Jackson Street.
March Street.
Waverley Street.

HAXBY ROAD DISTRICT:—

Walpole Street.
Markham Street.
Vyner Street.
Neville Terrace.
Haxby Road.

WALMGATE DISTRICT:—

Willow Street.
Hope Street (3 cases).
Walmgate.
Albert Street.
Dennis Street (2 cases).
Leicester Street.
Whitehouse's Passage.

**LAWRENCE STREET AND
HULL ROAD DISTRICT:—**

Farrar Street (2 cases).
Regent Street (2 cases).
James Street.
Seward Street.

LAYERTHORPE DISTRICT:—

Bilton Street.
Duke of York Street (2 cases).
Jones's Terrace.
Rymer Street.
Layerthorpe.

HOLGATE DISTRICT:—

Cleveland Street.
Poppleton Road.
Ash Street.
Lindley Street (2 cases).
Upper St. Paul's Terrace.
Blenheim Place.
Rosary Terrace.

BISHOPTHORPE ROAD DISTRICT:

Board Street (2 cases).
William Street (2 cases)
De Burgh Terrace.
Clement Street.
Clementhorpe.
Bewlay Street.
Colenso Street.
Bishopthorpe Road.

HUNGATE DISTRICT:—

St. Saviour's Place.
Garden Place.
Dundas Street (2 cases).
Hiram Place.

**FISHERGATE AND
CEMETERY ROAD DISTRICT:—**

Farndale Street.
Frances Street.
Fishergate.
Alma Terrace.
Winterscale Street.
St. Ann Street.
Elmwood Street.
Alne Terrace.
Bexley Square.

BISHOPHILL DISTRICT:—

Hampden Street.
Victor Street.

CENTRAL DISTRICT:—

King's Square.
 St. Andrewgate (2 cases).
 Spurriergate.
 Little Stonegate.
 Skeldergate.
 Stonegate.
 Petergate.

Clifton (3 cases).
 Monkgate.
 De Grey Street.
 Scarcroft View.

Heworth (2 cases).

NORTH STREET DISTRICT:—

North Street.
 Johnson's Buildings, Tanner Row.
 Tanner Row (2 cases).
 Rougier Terrace.
 All Saints' Lane.
 Tanner Street.

Ashville Street, Huntington Road.
 Plow's Yard, St. Maurice's Road.
 Claremont Terrace.
 Newbro' Street (2 cases); and

Condition of the Inspected Houses:—

68 were clean, 16 only moderately clean, three were decidedly filthy.

Six were found to be more or less damp.

76 were capable of through ventilation; 20 were ill-ventilated, 15 being back-to-back houses; three had bedroom windows fixed so as not to be capable of being opened.

64 houses were satisfactory as regards access of daylight; 26 were deficient in that respect.

At 29 houses there were gross sanitary defects—foul midden-privies, defective drains or water-closets, defective yard pavements. At 25 there were no proper ash or dust-bins.

At four houses fowls or canaries were kept so as to be a nuisance.

These sanitary defects have been corrected and proper ashbins ordered where absent.

Direct Measures of Prevention:—

(1) One of our leaflets on the causes and prevention of Consumption has been sent to every affected house.

(2) A special note of advice as to cleaning, disinfecting, etc., has been sent to the householders in respect of each death.

(3) Special advice has been given by the Medical Officer of Health or Inspectors during their visits, where it seemed necessary.

(4) 29 beds of patients have been steam-disinfected.

(5) 275 other articles have been steam-disinfected.

(6) 45 infected rooms have been fumigated.

(7) In a large number of cases the infected house or rooms have been cleansed upon our instructions—wall-papers stripped, ceilings and walls lime-washed, etc.

(8) In the case of very dirty houses, cleansing has been procured by compulsory order (Notice to cleanse and lime-wash).

We have not interfered with the employment of any person, and in much the patient and his co-residents have necessarily been left to the advice of the medical attendant.

It does seem a pity that this good work—for it is a good work, bound to yield life-saving results—cannot be extended as it would be if compulsory notification of Tuberculosis were to come about. This will undoubtedly come about in time; the pity is that, meanwhile, lives are being lost and much good work lies undone and inaccessible. Sheffield has already obtained powers for compulsory notification of Phthisis.

What we now want is an intelligent labourer to go round to the Phthisis-affected houses of the poor, to soak and strip wall-papers, periodically lime-wash, and do other work of disinfection, which the poor either cannot afford to do, or cannot be trusted to carry out thoroughly. Splendid work in this direction has been done by the Manchester and other Health Departments. Otherwise, we ought to supply the poor with lime-wash and lend them suitable brushes, as successfully done in some towns.

I also wish we could repeat our calls of inspection more frequently, but with our present staff and work this is utterly impossible.

It only remains for me to say that in the course of our investigations we have been very well received by the households, on the whole, and that our Inspectors have shown an intelligent appreciation of the requirements of the work.

The cost of the 35 notifications amounted to £4 7s. 6d.

The Medical Officer of Health reported to the Health Committee on February 7th, 1902, that the question of placing notices in railway stations and railway carriages regarding the dangers of spitting was being dealt with by the National Association for the Prevention of Consumption, but the Medical Officer of Health interviewed the General Manager of the North Eastern Railway Company upon that matter, and the cleansing of carriages, and it is highly satisfactory to record that the Railway Company's cleansing of compartments appears to be more thorough, and that notices regarding spitting now appear in their carriages.

CANCER.

Under the title "Cancer" are comprised:—Deaths from "Cancer, Carcinoma, Malignant Disease, Scirrhus, Epithelioma, Sarcoma, Villous Tumour and Papilloma of Bladder, and Rodent Ulcer, all different structural manifestations of the disease.

During the year 1903 there were 68 deaths from Cancer in the City, or 0.84 per 1,000 living. The figures for previous years are as follows:—

		Total Deaths.		Death-rate per 1,000 living.		Death-rate per 100,000.
1899	...	68	...	0.89	...	89
1900	...	70	...	0.91	...	91
1901	...	60	...	0.76	...	76
1902	...	71	...	0.89	...	89
1903	...	68	...	0.84	...	84

In 1903, one of the deaths occurred between the ages of 5 and 15, 37 between 25 and 65, and 30 at ages over 65;

18 in Bootham Registration Sub-District; 22 in Micklegate Registration Sub-District; 28 in Walmgate Registration Sub-District.

The following table differentiates the deaths according to the certified primary seat of the disease:—

"CANCER," "MALIGNANT DISEASE," "SCIRRHUS," OR "CARCINOMA":—

	Total Deaths.					
Face and Jaw	2
Female breasts	5
Mediastinum (chest)	1
Neck	1
Stomach	10
Intestine (colon, cæcum, etc.)	5
Liver	14
Pancreas	1
Gall-bladder	1
Œsophagus (gullet)	2
Rectum	5
Uterus and Vagina	12
Axilla	1
Shoulder	1
Not Stated	1

SARCOMA:—

Shoulder	1
Neck	1
Temporal Bone	1
Leg	1
Multiple	1

EPITHELIOMA:—

Tongue	1
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INQUESTS.

During the year 1903, 76 Inquests (5.7 per cent. of total deaths) were held on deaths of York citizens, as compared with 70 Inquests (5.7 per cent. of total deaths) in 1902. They are classified as follows:—

Deaths from Natural Causes.

	Bootham District.	Micklegate District.	Walmgate District.	Total.
Diabetes	0	1	1	2
Apoplexy	1	0	1	2
Heart Disease	2	8	4	14
Phthisis	1	0	0	1
Infantile "Convulsions"	0	5	7	12
False Croup	0	1	0	1
Infantile Debility	1	1	1	3
Alcoholism	0	0	1	1
Ruptured Bloodvessel	1	0	1	2
Enteritis and Diarrhœa	0	0	2	2
Bronchitis and Pneumonia	0	2	2	4
Negligence and Starvation	0	0	2	2
Puerperal Fever...	0	0	1	1
	6	18	23	47

Deaths by Accident and Suicide.

There were 18 deaths due to Accident and 10 to Suicide, which may be scheduled as follows:—

ACCIDENT :—

	Bootham.	Micklegate.	Walmgate.	Total.
Drowning	1	1	4	6
Falls	4	1	1	6
Burns and Scalds	1	1	1	3
Killed on Railway	0	1	0	1
Suffocated	0	0	2	2
	6	4	8	18

SUICIDE :—

Run over by Locomotive...	1	0	0	1
Drowning	2	1	1	4
Hanging	1	0	1	2
Poisoning	1	0	0	1
Strangling	1	0	1	2
	6	1	3	10

Murder, one, in Micklegate District.

The City Fever Hospital and the Bungalow.

The City Fever Hospital and the Bungalow (Small-pox Hospital), although more than a mile apart, are under the control of the same Matron.

The following cases of Infectious Disease were admitted into the two Hospitals during the year:—

From Bootham Sub-Registration District:—

40 Cases of Scarlet Fever.	}	60
4 Cases of Typhoid Fever.		
2 Cases of Diphtheria.		
14 Cases of Small-pox (including 8 from the Workhouse)		

From Micklegate Sub-Registration District:—

64 Cases of Scarlet Fever.	}	77
6 Cases of Typhoid Fever.		
1 Case of Diphtheria.		
6 Cases of Small-pox.		

From Walmgate Sub-Registration District:—

68 Cases of Scarlet Fever.	}	78
2 Cases of Typhoid Fever.		
1 Case of Diphtheria.		
7 Cases of Small-pox.		

Total City cases, 215.

From Flaxton Rural District:—

12 Cases of Scarlet Fever.	}	15
3 Cases of Typhoid Fever.		

From Escrick Rural District:—

12 Cases of Scarlet Fever.	}	18
6 Cases of Small-pox.		

From Bishopthorpe Rural District:—

1 Case of Scarlet Fever.	}	1
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In all, 249 Cases were received into the Fever Hospital during the year 1903 (viz.: 215 City Cases and 34 Rural Cases), as follows:—

197 Cases of Scarlet Fever.	{	City Cases, 172.
		Rural Cases, 25.
15 Cases of Typhoid Fever.	{	City Cases, 12.
		Rural Cases, 3.
4 Cases of Diphtheria,	—	all City Cases.
33 Cases of Small-pox.	{	City Cases, 27.
		Rural Cases, 6.

In 16 of the City cases, the cost of maintenance in Hospital was borne, partially or entirely, by the patients or their guardians, and they were attended by their own medical attendants; with 199, the cost was referred to the Board of Guardians, and the cases were attended by Dr. E. S. Angrove, Flaxton District Poor Law Medical Officer, by special arrangement.

Thanks to the generosity of many kind friends, the children isolated in Hospital at Christmas enjoyed a well-laden Christmas Tree, with numerous gifts and toys. During the year numerous other gifts of toys, books, pictures, etc., were received from kind friends in the city.

Ten of the City cases of Scarlet Fever proved to be doubtful cases, and of the 12 City Typhoid cases, one died from Phthisis and one proved to be a short indefinite feverish attack.

Of the 197 cases of Scarlet Fever treated in Hospital, 9 died (8 City cases and 1 from Flaxton Rural District), or 4.5 per cent. Six of the cases were malignant and three had fatal complications—bronchitis and meningitis.

There were no deaths in Hospital due to Diphtheria or Typhoid Fever.

Six of the Small-pox cases died in the Bungalow (see details under heading "Small-pox.")

The cost of board for patients and staff in Hospital varied from 4s. 4d. to 6s. 6d. per week per head, during the year.

The Staff consisted of:—Matron, two Charge Nurses, and four Probationer Nurses, five maids (cook, housemaid, ward-maid, and two laundresses), and Porter.

Probationer Nurses are engaged for Fever training, and are "signed-on" for an inclusive term of two years' service—salary £15 to £18 a year with indoor uniform. All the female members of the staff are provided with indoor uniform in addition to salary. No outdoor uniform is provided or required.

During the year four extra trained nurses, from the York Home in Monk-gate, and elsewhere, were employed for short periods under the stress of the Small-pox work.

In July, regulations for the management of the Hospital and Staff were drawn up by the Health Committee, and printed for distribution amongst the Staff.

During the year 1903 and winter 1903-04 the following improvements were carried out in the Hospital Wards:—

A vertical flue was provided to one of the Shorland stoves in the Typhoid Pavilion, in lieu of a very troublesome horizontal flue.

The old boxed-up water closets and baths in both Pavilions were substituted by pedestal wash-down water-closets with new cisterns, and vitreous enamel baths; and the wooden flooring of the bathrooms was substituted by cement concrete.

New slop-sinks were also provided in the Scarlet Fever Pavilion, like those provided in the Typhoid Pavilion in 1902.

Extension of the Fever Hospital.

Negotiations with owners and with the Local Government Board during 1902 and 1903 resulted in the Board sanctioning in November, 1903, a loan for the sum of £2,485 for the purchase of about 12 acres of land immediately adjacent to the present Hospital.

About 2½ acres, purchased from Mr. Francis Ware, abut on the Huntington Road, immediately north of the Hospital, and 9½ acres, purchased from the Crown, are situated east of the Hospital.

The whole site is a very convenient one for extension.

The Board required an undertaking from the Council that cases of Small-pox shall not at any time be isolated on any part of the site as now enlarged.

The "Bungalow" Suspect or Small-pox Hospital.

This Hospital is over a mile away from the Fever Hospital, and there are only 18 inhabitants within a circle of a quarter mile. A resident caretaker is in charge, and Nurses are supplied from the Fever Hospital to nurse cases sent in.

To this Building an additional ward-building was added in March, 1903, in consequence of the extensive prevalence of Small-pox in the Northern Counties, especially in the neighbouring West Riding. This was built in four weeks at a cost of £531. It consists of a large ward and a small private ward (for cases dying, etc.), and will accommodate 14 patients. It is built of brick, colourwashed on the inside (no plaster work), roofed with slate, and floored with wood raised a few inches above the concrete basement, the interspace being freely ventilated. Free ventilation of all the wards is provided for.

The whole Hospital will accommodate 20 patients, and is warmed by ordinary coal fires, lighted with gas, supplied with water from the mains of the Waterworks Company, and provided with earth-closets.

During the Small-pox outbreak in the winter, 1903-04, it accommodated as many as 14 patients at one time.

Mrs. Trainer, first caretaker, resigned in May, 1903, and Mr. and Mrs. Thomas Henry Stevens, were appointed caretakers of the Bungalow.

CASES OF INFECTIOUS DISEASE RECEIVED INTO CITY FEVER HOSPITAL, &c.

	SCARLET FEVER.						TYPHOID FEVER.				SMALLPOX.	
	Number of Cases of Cases Notified.	Number of Cases received into Fever Hospital.	Percentage of Cases received into Hospital.	Percentage of Cases declined for want of Accommodation.	Rural District cases received into Fever Hospital.	Number of Cases of Cases Notified.	Number of Cases received into Fever Hospital.	Cases received into County Hospital.	Percentage of Cases received into Hospital.	Percentage of Cases declined for want of Accommodation.	Number of Cases Notified.	Number of Cases received into City Fever Hospital.
Year.												
1891	98	19	19.3	...	...	119	4	...	3.3	...	...	...
1892	109	18	16.5	...	...	179	1	...	0.55	...	2	2
1893	156	6	3.8	...	...	287	...	69	24	...	72	71
1894	108	17	15.7	...	...	95	...	30	31.5	...	3	3
1895	138	32	23.2	...	...	180	...	53	29	...	...	...
1896	194	62	31.9	... about 30	...	101	...	34	33.6	...	...	...
1897	270	96	35.5	...	...	106	...	36	34	... about 20	...	...
1898	364	133	36.5	50	11	132	...	48	36.3	20	4	3
1899	200	105	52.5	...	12	134	7	23	22.3	20	2	2
1900	325	167	51.3	40	8	244	25	49	30.3	20	...	...
1901	262	128	48.8	20	12	121	26	27	43.8	20	1	2
1902	279	137	49.1	30	27	60	8	12	33.3	nil	3	3
1903	287	172	59.5	25	25	52	12	2	27	nil	27	27
	In 1900 Three cases of German Measles were received into fever Hospital from City. Two cases of Diphtheria were received into Hospital between January, 1898, and December, 1901. Three cases were received in 1902, and Four in 1903.				In 1901 One case of Typhoid Fever was received into Fever Hospital from the Bishopthorpe Rural District. In 1903, Three cases from Flaxton Rural District.				In 1903 Six cases of Smallpox were received from Easingwold Rural District.			

Small-pox cases received into the Bungalow from its opening November, 1902, to the end of March, 1904.

City Cases—In 1902	...	...	...	...	...	...	2
In 1903	...	...	...	...	...	...	27
January 1st to March 31st, 1904	...	...	...	...	...	...	10
							—
							39
From Eserick Rural District—							
In 1903	...	...	...	...	...	...	6
In 1904	...	...	...	...	...	...	2
							—
						Total	47

During the year the Eserick Rural District Council made two or three applications to the York Corporation Health Committee, asking if they would receive Small-pox cases from their district if such occurred, but these applications were declined.

In December, however, cases of Small-pox occurred at Deighton and Fulford, and found the Eserick Rural District Council still unprepared. Negotiations between that Council and the Health Committee resulted in our taking in the two cases above mentioned, and also in the following arrangement:—

“That in the present emergency this (the Health) Committee are prepared to meet the wishes of the Eserick Rural District Council by receiving into their Small-pox Isolation Hospital persons suffering from Small-pox from the area of the District Council, at a charge of 5 guineas per patient, per week, this to apply to the present outbreak only, and so far as the accommodation in the Hospital is not required for City patients; also that the Rural District Council be recommended to take immediate steps to provide an Isolation Hospital for their own requirements.”

The Rural Council have since built a Hospital of their own.

St. George's Public Baths.

These baths, the property of the Corporation, were taken over to be managed by the Corporation in 1901. They are under the control of the Health Committee and City Surveyor.

Special facilities were given to the Elementary Schools for bathing and swimming by scholars.

Over 16,508 used the first-class baths during the year 1902, and 12,890 the second-class baths. Total receipts, £442 15s. 4d.

The Situation, Geology, and Climate of the City were described in last year's Annual Report.

The Water-supply of the City.

The water supply is in the hands of a private Company—the York Waterworks Company, and was described more fully in last year's Annual Report.

The water is drawn from the River Ouse at a point about a mile above the centre of the City. The Ouse is a free flowing river of great volume, with a water-shed area above York of about 1,200 square miles (including its tributaries the Swale, Ure, and Nidd).

The sources of the river are in the mountainous and moorland districts of North-west Yorkshire.

Great care is taken in the purification of the water at the Waterworks.

Not within my knowledge has any illness in the City been traceable to the Company's water-supply as a cause.

The following is a sample analysis of the City tap-water taken during the summer months of 1903 and carefully analysed in my own laboratory:—

Appearance clear, with slight yellowish tinge (due to clay or peat),
free from odour—— slightly alkaline.

	Parts per 100,000.
Total solids	27·8
Free Ammonia	0·0027
Albuminoid Ammonia	0·0069
Chlorine	1·8
Oxygen absorbed in four hours at 80° F. ...	0·147
Nitrogen as Nitrates	nil
Number of bacterial colonies per cubic centimetre after four days' incubation at 20° C. }	6
Ditto on Carbolised Gelatine	nil
The average total hardness during the year is 10 degrees (Clark) or 10 grains per gallon. }	Temporary, 8 grains Permanent, 2 „

There are a few surface wells still existent in the City, but they are diminishing in number, as they are usually found to be polluted or subject to pollution. They are usually closed by the owners, voluntarily, when found to be polluted; eight were so dealt with or improved during 1903.

Water-supply in Houses.

During the year continued attention was directed to the question of the sufficiency of the water-supply in the City working-class houses.

Under the Public Health Act, 1875 (Section 62), the duty of reporting upon insufficient water-supply devolves upon the Surveyor of the Sanitary Authority, and it rests entirely with the Sanitary Authority to say what is a sufficient or "proper" water supply.

Neither the Act nor the Local Government Board prescribe a standard.

In 1902 it was resolved by the Health Committee to deal with each case on its merits, increasing the supply so that there shall not be more than six or seven houses to each tap in courts and alleys, the tap to be within easy reach of all.

To place a tap in every house was, in many cases, considered by the Health Committee to be impracticable or undesirable, and they resolved

“That in the opinion of this Committee it is desirable that a water tap should be placed in every house unless the circumstances of any individual case render such a course undesirable.”

During the year 1903, 141 houses were reported to the Surveyor by the Medical Officer of Health and Inspector of Nuisances, with regard to this question, and notices were served increasing the supply to 230 houses.

Polluted Streams.

The attention of those concerned was called to:—

- (1) The pollution of Holgate Beck by Acomb Sewage Farm. (New Sewage Works are now in progress at Acomb).
- (2) The pollution of the River Foss and of Yearsley Baths by sewage from houses in Flaxton Rural District.

The Disposal of Excrement and Refuse.

The scavenging and sewerage of the City are under the control of the City Surveyor, and to him I am indebted for some of the following facts.

The methods in vogue in the City consist of:—

- (1) About 5,000 midden-privies, the contents of which are removed systematically about once a month by and at the cost of the Corporation. The manure is sold to farmers, part being forwarded from the City by rail.

The midden-privies are still diminishing in number, as many of them are found to be nuisances or insufficient (under Section 36, Public Health Act, 1875).

- (2) About 11,000 water-closets, of which about 2,000 are waste-water closets. The provision of the latter is now discouraged, however, as in so many cases they prove to be nuisances, for want of cleansing, or through blockage through the deposit of improper substances—coals, old clothes, boots, bottles, etc. Every effort is being made to encourage the provision of water-closets of the wash-down or short hopper type.

- (3) Less than a score pail or tub closets, the contents of which are emptied by and disposed of to farmers or gardeners by the owners or occupiers.
- (4) Several thousand dry ashpits and galvanised-iron receptacles (or ashbins), in use at houses where there are water-closets and no midden-privies. The contents of these are collected by our scavengers twice a week and destroyed in a Manlove and Alliott's Refuse Destructor (of 4 cells) which consumes about 36 tons of refuse per day and produces about 15 tons of clinker per day. 9,974 tons of such refuse were thus collected and destroyed in 1903.

Measures are being taken under Section 36 of the Public Health Act, to secure the provision of proper iron ashbins, with covers, in lieu of wooden boxes, old tins, and other leaky and lidless receptacles at present largely used by occupiers to the production of nuisance and of danger to health.

On the 28th May, 1903, I reported to the Health Committee on the subject as follows:—

“I think that the Committee ought to insist upon proper galvanised-iron dry-ashes receptacles, with proper lid, being provided at every house in the City where there is a water-closet, but not a dry ashpit or a proper receptacle. Wooden tubs and boxes and old tins, etc., ought not to be allowed. These should be dealt with as insufficient, under Section 36, Public Health Act, 1875. Absurdly small iron receptacles ought also to be deemed insufficient. Not only should a sufficient receptacle be insisted upon, but also that the receptacle should have a proper lid (“proper door and covering,” vide Section 36).

Instructions should be given to the Inspector of Nuisances to report houses so insufficiently provided to the Committee; and it appears to me that owners of new houses who don't provide proper receptacles should be penalised under Section 35, Public Health Act.

I need not dilate upon the several nuisances created by insufficient ashbin provision:—Where there is no receptacle at all, ashes and refuse, often decomposing vegetable and animal matter, accumulate in the house or yards, or are thrown into the back street, polluting the ground and air, and being blown out by winds into houses, pantries, etc.

Old tubs, boxes, tins, etc., can scarcely be called receptacles at all. They are often foul and leaking, they are often so small as to be generally over-loaded, they have usually no cover, and their contents are free to children, dogs, cats, and fowls, and to the winds. Instead of refuse collection, therefore, we get refuse distribution.

Surely, also, proper receptacles would expedite the scavenging and diminish its cost.”

And it was resolved that the Committee adopt the suggestions of the Medical Officer of Health, and that the Streets and Buildings Committee be requested not to give certificates of completion in respect of new houses unless proper ashes receptacles are provided to such houses.

This request was acceded to and notices were ordered to be sent to the builders in the City, informing them that proceedings would be taken against any person allowing a house to be occupied without a proper ashes receptacle being provided to such house.

Three sample sizes of ashbins are kept at the City Surveyor's Offices for inspection.

Housing of the Working Classes Act, 1890.

The following houses were declared unfit for habitation or otherwise dealt with during the year 1903 :—

St. Lawrence Court, five houses, damp, much improved by owner.

Three tenements behind Cundall's Buildings, Skeldergate ; closed by magistrates' order ; buildings demolished by agreement with owner ; and site handed over to the Corporation for £50.

No. 1, Grunt Lane, Carmelite Place ; closed voluntarily by owners.

Nos. 8 and 9, St. Saviour's Court ; improved by owner.

Nos. 1 and 2, Haymarket ; converted into one house and otherwise improved by owner.

House in St. Martin's Lane ; closed by owner.

House in Marygate Lane ; improved by owner.

Further proceedings in connection with the following houses are in progress :—

Six tenements in Beedham's Court, Skeldergate ; closed by magistrates' order.

St. Saviour's Court, Nos. 12—15.

Hiram Place, Hungate.

Cariss's Buildings, Barker Lane.

Kelly's Yard, Walmgate.

In March, 1903, the York Corporation united with other Local Authorities, Housing Associations, etc., in appealing to the Local Government Board in favour of certain amendments in the Housing of the Working Classes Act, 1890. The petitioners had the satisfaction of seeing the valuable Amendment Act of 1903 placed upon the Statute book.

From the Annual Reports of the Building Inspectors we learn that during the year the following small **New Houses** were built in the City:—

Probable Rentals.		East side of River.		West side of River.		Totals.	
£13 or under	...	90	...	41	...	131	} Total. 311
£14 to £18	...	80	...	92	...	172	
£18 to £25	...	7	...	1	...	8	

as compared with a total of 338 for last year.

The chief building has been on South Bank and Nunthorpe Estates, Poppleton Road, and Leeman Road; Hull Road, Huntington Road, Lawrence Street, Burton Lane, and Fulford Road.

It is satisfactory to observe that not one new privy-midden was erected during the year.

The following excellent requirements regarding the erection of green-houses in back yards, adopted by the Corporation upon the recommendation of the City Surveyor, have a direct relation to the healthy housing of the working classes, and may well be quoted here:—

- (1) That at least 200 superficial feet of yard space will remain open and uncovered after the erection of the greenhouse.
- (2) That opening lights be provided in the roof or sides of the greenhouse, equal in area to at least one-half of the area of the windows that will be covered by such erection.
- (3) That the framework shall be placed on a 9-inch brick wall, at least 2 feet 9 inches high.
- (4) That no gully shall remain or water pipe discharge into a drain inside such greenhouse.

Administration of the Factory and Workshops Act, 1901.

During the year 1903, 517 workshops were registered and the names of 123 outworkers (or homeworkers) were received.

On the whole the workshops, retail bakehouses, etc., were found to be in a satisfactory condition. Below is a tabular statement of improvement work ordered and carried out during the year. No legal proceedings had to be instituted.

There are nine underground bakehouses in the City, some of which are unsatisfactory, and are now being dealt with (1904) according to the following provision of the Act:—

“After the first day of January, 1904, an underground bakehouse shall not be used unless certified by the District Council to be suitable for that purpose.”

The following is a Summary of the work carried out during the year 1902 under the Act:—

Number of Workshops entered on New Register ... 517
These included:—

Tenement Workshops	4
Domestic Workshops	57
Retail Bakehouses	70
Laundries	7
Other Workshops... ..	379
Number of “Workplaces” (not included in above total)	16
Number of Domestic factories	0
Number of lists of Outworkers received	48
(representing 28 Employers and 123 outworkers, all of whom are engaged in making wearing apparel).	

Workshops and Domestic Workshops:—

Number inspected	231
Number of inspections made	353
Notices served under Public Health Acts re Sanitary defects	54
Sanitary arrangements improved at	24
Number of notices to cleanse and limewash	55
Number of notices to abate overcrowding	2
Number of notices to improve ventilation	2
Number of notices to provide means of ventilation (Sec. 7)	1
Number of notices re wet floors (Sec. 8)	nil
Legal proceedings taken	nil

Retail Bakehouses

(70 in number):—

Number inspected	49
Notices served as to closets	1
Notices served as to water-cisterns	0
Notices to remove drain openings	1
Notices served to limewash	11
Number of bakehouses dealt with as sanitarily unfit ...	0
Legal proceedings taken	nil
Number where Sanitary Arrangements improved ...	3

Workplaces

(restaurant kitchens, stables, etc.):—

Number inspected	16
Notices or other action taken	4

Sanitary Conveniences in Workshops:—

Closets were insufficient or unsuitable at	8
There were not closets separate for the sexes at ...	3

These were dealt with under Section 22 of the Public Health Acts Amendment Act, 1890, which was adopted by York Corporation, April 4th, 1892.

Homework

(Sections 107 to 115):—

Number of Outworker's premises inspected	78
Number found unwholesome and occupiers ordered to cleanse	12
Work was stopped because of the prevalence of infectious disease (viz., Scarlet Fever) vide Section 110 ...	0
Names of outworkers, with places of employment, for- warded to the Clerks of Councils in whose districts their places of employment were	4

Two sanitary defects were reported to the York Sanitary Authority by H.M. Inspector of Factories during 1903—one insufficient ventilation and the other absence of separate closet for females.

Forty-one Infringements of the Act were reported by me to H.M. Inspector of Factories, under section 133, in March, 1903; no others during 1903.

Full details of the Workshops and of our Inspections were placed upon record, in accordance with the Act.

The undermentioned trades were carried on in the Workshops inspected :—

Trades.	Number inspected.
Mantlemaking	1
Dressmaking	32
Baking	53
Millinery... ..	23
Tailoring... ..	33
Paper Bag making	1
Saddlers	10
Painter	1
Jam Making	1
Whitesmiths	2
Blacksmiths	1
Rag and Paper Sorting	1
Bottling	1
Dyeing	2
Plumbing	7
Weighing Machine Making	1
Watch Making	4
Boot and Shoe Making	24
Joinery	5
Picture Framing	2
Marble Mason	1

Trades.							Number inspected
Tinsmiths	...	...	...	...	...	...	4
Wheelwrights	...	...	...	...	...	...	3
Malting ...	...	...	...	...	...	...	1
Upholsterer	...	...	...	...	...	...	1
Shoeing Smith	...	...	...	...	...	...	1
Shirt Making	...	...	...	...	...	...	3
Stocking Knitting...	...	...	...	...	...	...	2
Mason ...	...	...	...	...	...	...	1
Photography	...	...	...	...	...	...	2
Cycle Making	...	...	...	...	...	...	1
Corset Making	...	...	...	...	...	...	1
Mackintosh Making	...	...	...	...	...	...	1
Book Binding	...	...	...	...	...	...	1
Laundry ...	...	...	...	...	...	...	1
Sugar Boiling	...	...	...	...	...	...	1
Basket Making	...	...	...	...	...	...	1

Total number inspected ... 231

Total Trades 37.

York Corporation Act, 1902.

In June, 1903, the Council ordered that Part V. of the York Corporation Act, 1902, relating to Milk Supply (Tuberculosis) shall come into operation on and after the 15th August next, that notice of the effect of the provisions of such Part V. of the Act be given as in the Act directed, and that a copy of such notice be affixed on the outer door of the Guildhall, and also sent to each Dairyman, Cowkeeper, and Milk Seller in the City, and to those outside the City who supply Milk to the citizens, as far as such persons may be known.

This was done, together with copies of the clauses of Part V.

Copies of Part IV., on general "Sanitary Matters," were sent to Schoolmasters, Private Schools, Dairy-men, Ice-Cream Makers, Laundry Proprietors, and Public Libraries, etc.

Copies of Part VI., on "Common Lodging Houses," were sent to the Keepers of such houses in the city.

Other efforts were made to make these sections of the Act known and arrangements were made to help Libraries re the infection of books. Cases dealt with under the ice-cream clauses are referred to in the Report of the Inspector of Nuisances.

Other work under the Act will be better referred to in the Annual Report for next year, 1904.

Public Health Lectures.

The offer of the Royal Institute of Public Health to organise Lectures in the City was accepted, and a course of three Lectures was arranged for the early part of the year, 1904, the lectures to be delivered by Professor W. R. Smith, of London, Dr. Hope, Medical Officer of Health for Liverpool, and Dr. Andrew Wilson.

The Sanitary Institute Congress, 1903.

In July, 1902, the Chairman of the Health Committee (Alderman Border), the City Engineer and the Medical Officer of Health attended the Congress at Bradford, as delegates of the York Corporation, and the whole of the Health Committee visited the Health Exhibition.

Laboratory Work.

During the year the following work was done in the Medical Officer of Health's Laboratory:—

Samples of Sewage and effluents analysed	103
Samples of River Water for suspended solids	140
Samples of Beck Waters analysed	7
Samples of Well Waters analysed	8
Various sundry analyses	10
Specimens of sputum examined for tubercle bacilli (12 with positive, 3 with negative result).	15
Throat-swabs examined for Diphtheria bacilli (4 with positive, 4 with negative result).	8
Specimens of blood submitted to Widal's test for Typhoid Fever (3 positive, 3 negative result).	6
Blood from Pig's ears examined for Anthrax bacillus (both with positive results).	2

The Staff of the Health Department.

At the end of October the Medical Officer of Health fell ill with an attack of Enteric Fever, which enforced his absence from work until the end of March, 1904.

Mr. Henry Norman Goode, M.B. (London), D.P.H. (London), M.R.C.S., L.R.C.P., of York, was, with the approval of the Local Government Board, appointed Deputy Medical Officer of Health, and rendered very valuable services during a period which proved very busy and trying by reason of the prevalence of Small-pox, and of an epidemic of Measles and Whooping Cough.

During a few days about Christmas in which Dr. Goode was incapacitated by an attack of Influenza, Mr. J. Prest Wightman, of York, acted as Deputy.

It is a great satisfaction to record that after the publication of the Annual Report for 1902, the following resolution was passed:

“That this, the Health Committee, having considered the Annual Report of the Medical Officer of Health for the year 1902 recently presented to them, desire to place on record their high appreciation of this valuable and interesting work. The Vital Statistics in regard to the health of the City, and the detailed information which he has supplied upon the working of the multifarious matters connected with this Department, prove that the Medical Officer of Health has spared no efforts in its compilation, and the greatest credit is due to him for such a skilful and satisfactory work during the year under review.”

In August, 1903, the Health Committee took into consideration the question of re-arranging the work of Mr. Jonathan Atkinson, the Inspector of Nuisances, in consequence of his failing health, and it was agreed that he should be relieved of the more arduous work of his Department, and perform such lighter duties as this Committee might require of him, at the salary of £120 per annum, commencing as from the 1st November.

Mr. Atkinson had then served the Corporation as their first Chief Inspector of Nuisances for thirty years, and had attained the age of seventy years. In the Annual Report for last year, 1902, he gave an account of the principal sanitary works achieved in his Department during that long period of faithful public service.

Mr. Alfred Edwin Drummond, who had served the Corporation for over ten years as an Assistant Inspector, was now appointed Inspector of Nuisances under the York Corporation Act, 1902, it being understood that he would undertake the active work of Chief Inspector.

West Riding Sanitary Lectures.

The Chairman and Vice-Chairman of the Health Committee and the Medical Officer of Health were appointed representatives of the York Corporation upon the Joint Committee of the West Riding County Council and County Boroughs, which organised a course of lectures and demonstrations on Meat Inspection, for Sanitary Inspectors and others, on Saturday afternoons during the Winter, 1903-04. The four Assistant Inspectors of the York Corporation, along with two pupils of the Health Department, were given liberty to attend the course, their expenses being paid by the Joint Committee in accordance with the provisions of the scheme.

At the examination for the Meat Inspector's Certificate of the Sanitary Institute held at the end of the course, three of the four York Inspectors obtained the certificate, and two-thirds of the examination fees of the four Inspectors were defrayed by the York Corporation.

The Staff of the Health Department now consists of :—

The Medical Officer of Health.
 Two Inspectors of Nuisances.
 Three Assistant Inspectors of Nuisances.
 Two Clerks.
 Disinfecting Attendant.
 Ambulance Driver.
 Drain-testing Assistant.
 also :— Public Analyst.
 Veterinary Meat and Cattle Inspector.
 Canal Boats Inspector.

REPORT OF THE INSPECTOR OF NUISANCES.

1903.

I have the honour to submit for your information a statement of Sanitary work carried out under Notices for the Abatement of Nuisances, etc., during the year 1903.

In the period named 3,387 houses and premises have been inspected, 1,148 of which were found to require sanitary improvements.

2,020 notices have been served on owners and occupiers to execute various sanitary works to remedy the defects found on the said premises.

It will be seen by the tabular statement :—

That during the year 140 privies have been converted into water closets and the ashpits in connection therewith abolished.

A considerable number of these premises had no back road, consequently the refuse had to be removed through the dwellinghouses.

The question of overcrowding has occupied a share of attention and supervision, and during the year 11 cases have been dealt with, in most of which the tenants have been required to remove to larger houses. In these cases the tenants have often a difficulty in obtaining suitable accommodation elsewhere.

During the year 230 houses have been provided with a proper supply of water.

62 additional water-closets have been provided to houses where there was an insufficient number for the proper accommodation of the inmates.

In May, 1903, Assistant Inspectors Grace and Swinney resigned their situations in consequence of having been appointed to other situations elsewhere.

These changes, as in the previous year, unavoidably interfered somewhat with the progress of the work of the Health Department, as some weeks elapsed before the new Inspectors appointed commenced their duties.

Owing to the prevalence of Small-pox during the year a considerable amount of time has been devoted by the Staff to visitation of contacts, disinfection of houses, bedding, clothing, etc.

Common Lodging Houses.

On the whole these houses have been fairly well conducted during the year ; but some are not entirely satisfactory.

Several of the day rooms, being too small and imperfectly ventilated, will come under special consideration at an early date, as in future they have to be re-registered every year under the York Corporation Act, 1902.

In consequence of the prevalence of Small-pox in the City and in the West Riding the houses have frequently been visited during the day—and evening—and enquiries made as to the occurrence of any cases of sickness.

The following new articles of bedding have been provided by the occupiers during the year, viz. :—

- 11 new beds.
- 6 new mattresses.
- 6 new pillows.
- 7 new coverlets or counterpanes.
- 18 new sheets.
- 24 blankets.
- 6 towels.

Slaughter Houses.

There are 83 Private Slaughter-houses in the City.

893 visits of inspection have been made, and 367 notices to limewash were complied with.

During the year the condition of five of these has been improved ; the floors have been laid with cement concrete ; the walls rendered with cement, and the drain openings removed outside.

The means of lighting and ventilating of one have been improved.

An improvement in the conditions of all is coming about gradually.

Their cleanliness has been well maintained throughout the year.

Cowsheds.

There are 85 Cowsheds in the City and 58 Cow-keepers.

2 persons have registered themselves as Cow-keepers, and 8 persons have given up keeping cows.

123 visits of inspection have been made.

173 notices to limewash have been complied with, and

4 sheds have been re-constructed and improved.

Many of the Cowsheds still require improvement as regards structure, air-space, light, and ventilation.

Houses Let in Lodgings.

During the year three applications were received from the landlords of nine houses to register their premises under the provisions of the bye-laws relating to "Houses let in Lodgings," or occupied by members of more than one family.

The Health Committee refused to grant one of these applications (relating to three houses) on account of the houses being unfit for that purpose, and resolved that notice be served on the landlord to discontinue letting or allowing the houses to be let or occupied as Lodging houses.

With respect to the other two, it was decided to register the front rooms at Nos. 6 and 8, Rosemary Place, and the room in the yard behind No. 7, Rosemary Place, each room to accommodate two persons.

Also 4 rooms at No. 41, Hope Street to accommodate 12 persons.

4 rooms at No. 42, Hope Street to accommodate 8 persons.

2 rooms at No. 43, Hope Street to accommodate 6 persons.

Ice Cream Dealers.

19 premises in which Ice Cream is made have been inspected under the provisions of section 59 of the York Corporation Act, 1902, which regulates the manufacturing and sale of Ice Cream or other similar commodity.

Four of these premises were reported to the Health Committee as being unfit for that purpose, and notices were served upon the occupiers to discontinue making or selling Ice Cream on the premises.

Three samples were obtained for analysis under the Food and Drugs Acts. They were certified by the Public Analyst to be genuine.

Owing to the failure of the owners to comply with the notices served upon them to effect sanitary improvements, the undermentioned works were carried out by the Corporation under the provisions of the Public Health Act, 1875 :—

Number of houses provided with a sufficient drain	...	...	6
Number of houses provided with a sufficient water closet	...	...	6
Number of houses provided with a sufficient supply of water...			36

The attention of the City Surveyor has been called to the following defects :

The condition of back roads	...	...	...	6
Nuisances arising from sewers	...	...	...	5
Choked street gullies	...	...	...	7
Offensive smells from sewer ventilators	...	...	...	5
Nuisances from night-soil, refuse, etc.	...	...	...	4
Dangerous walls	...	...	...	4
Total				31

Report of the Inspector of Nuisances on Sanitary Work carried out under Notice during the year 1903 :—

Number of Inspections made	...	...	...	...	3387
Number of premises which required Sanitary Improvement	...	...	...	...	1148
Houses without sufficient Sanitary accommodation	...	...	...	...	220
Number of houses inspected, and Reports made to the Medical Officer of Health, where cases of Infectious Diseases have occurred (including Phthisis)	...	...	...	...	601
Notifications of Infectious Disease sent to the Head Teachers of Schools	...	...	...	...	574
Notifications sent to the Clerk of the School Board	...	...	...	...	380
Number of Notices served...	...	...	...	...	2020
Number of letters sent	...	...	...	...	367

Description of Work carried out.

Privies :—

Converted into Water-closets	...	...	...	...	140
Floors cemented	...	...	...	...	26
Walls Cemented	...	...	...	...	20
Repaired	...	...	...	...	7
Limewashed	...	...	...	...	1
Abolished	...	...	...	...	1
Re-constructed and placed in more suitable positions	...	...	...	...	0
Additional provided	...	...	...	...	1

Ashpits :—

Abolished	...	...	...	...	130
Floors laid with cement concrete	...	...	...	...	139
Repaired	...	...	...	...	26
Furnished with proper covering	...	...	...	...	2
Portable receptacles provided	...	...	...	...	374
Re-constructed	...	...	...	...	0
Inside walls cemented	...	...	...	...	33

Drains :—

Constructed with stoneware pipes	...	...	...	...	241
Disconnected from main sewer	...	...	...	...	133
Ventilated	...	...	...	...	129
Waste pipes of sinks disconnected from drains	...	...	...	...	13
Drains under houses abolished	...	...	...	...	17
Stoneware syphon traps fixed under grates in yards	...	...	...	...	83
Waste pipes of sinks trapped or repaired	...	...	...	...	60
Cleansed or repaired	...	...	...	...	56
Urinals cleansed	...	...	...	...	4
Urinals provided	...	...	...	...	1
Additional gullies fixed in yards	...	...	...	...	10
Cesspits abolished	...	...	...	...	12

Water Closets :—

Provided with a sufficient supply of water	...	...	...	...	12
Limewashed or cleansed	...	...	...	...	46
Additional provided	...	...	...	...	62
“Wash Down” Water-closets provided in lieu of “Old Pan” apparatus	...	...	...	...	5
Repaired	...	...	...	...	76
Soil pipes repaired	...	...	...	...	9
New Flush pipes fixed	...	...	...	...	4
Light and ventilation provided	...	...	...	...	2
Abolished	...	...	...	...	1
Provided with a proper supply of water	...	...	...	...	230

Houses :—

Cleansed and limewashed	...	...	...	...	82
Unfit for habitation; Closed	...	...	...	...	15
Unfit for habitation; Improved	...	...	...	...	19
Roofs, etc., repaired	...	...	...	...	48
Water Spouts fixed or repaired	...	...	...	...	85
Down Spouts disconnected from drain	...	...	...	...	65
Overcrowding abated	...	...	...	...	11
New sinks fixed	...	...	...	...	5
Accumulations of offensive refuse removed	...	...	...	...	45
Nuisances abated, arising from the keeping of swine, and other animals	...	...	...	...	34
To limewash Common Lodging Houses	...	...	...	...	46
Pavements of yards of dwelling-houses repaired	...	...	...	...	32
Yards repaved with cement concrete	...	...	...	...	73
Yards repaved with asphalte	...	...	...	...	32

Cowsheds (85) :—

Visits of inspection made	...	...	...	...	123
Limewashed, or repaired and ventilated	...	...	...	...	173
Cowsheds constructed	...	...	...	...	4
Closed, or discontinued as such, since January, 1903	...	...	...	...	8
Repaired or improved	...	...	...	...	2

Slaughter-houses (83) :—

Visits of inspection made...	...	...	...	...	893
Limewashed, cleansed or repaired...	...	...	...	...	367
Closed, or discontinued as such since January, 1903	...	...	...	...	0

Infectious Diseases :—

Patients removed to Hospitals in Ambulance	...	...	...	260
Rooms disinfected	...	...	...	532
Articles disinfected by Steam Disinfector	...	...	...	7631

Miscellaneous works not classified above	16
--	-----	-----	-----	----

Also, 141 houses have been reported to the City Surveyor with regard to the question of water-supply.

Smoke Observations.

Number of Chimneys of which observations were taken	...	...	...	...	10
Number of observations	...	...	...	...	46
Number in which black smoke was emitted in such quantity	...	...	...	...	...
as to be a nuisance	...	...	...	...	28
Number of occupiers cautioned	...	...	...	...	5
Number of notices served to abate nuisance	...	...	...	...	1

Sale of Food and Drugs Acts.

During the year 137 samples of Food and Drugs have been procured and submitted to the Public Analyst, who certified 135 samples genuine and 2 adulterated (i.e., 1.45 per cent. were adulterated), viz.:—

Samples of Milk adulterated as under:—

No. 1 Result—Solids not fat	...	...	...	...	8.11
Fat	...	...	...	...	3.43
Water	...	...	...	...	88.46
Total					100.00
No action taken on this case.					
No. 2 Result—Solids not fat	...	...	...	...	8.07
Fat	...	...	...	...	2.72
Water	...	...	...	...	89.21
Total					100.00

The Public Analyst stated that this sample was adulterated with 5.06 per cent. of added water, and also deficient in fat to the extent of 9.34 per cent. (See Prosecutions).

Description of Samples.	Number of Samples.
New Milk ...	67
Butter...	25
Margarine ...	9
Lard ...	10
Jam ...	5
Treacle ...	2
Pepper ...	2
Ale ...	2
Coffee ...	1
Cheese ...	3
Tea ...	1
Sweets ...	4
Sugar ...	1
Gregory's Powder ...	1
Ice Cream ...	3
Honey ...	1

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Prosecutions, &c.

Nature of Offence.	Decision of Court.
Depositing the carcasses of animals on premises so as to be a nuisance	Order made prohibiting a recurrence of the nuisance, and also fined 20s. and costs.
Failing to comply with an order of the Sanitary Authority to abate nuisance from a foul privy and ashpit, and for that purpose to abolish the ashpit, and convert the privy into a water-closet	Order obtained to carry out the works ordered by the Sanitary Authority within one month, and to pay the costs.
For keeping an un-registered Common Lodging House.	Fined 20s. and costs.
Selling new milk, not of the nature, substance and quality demanded	Fined 20s. and costs.
Carcase of a pig which was unwholesome and unfit for the food of man	Seized, and Justices' Order obtained for its destruction.
Five pieces of meat in a putrid and unwholesome state, and unfit for the food of man.	Seized, and Justices' Order obtained for its destruction, the owners were cautioned by the Town Clerk by order of the Health Committee.
Selling Margarine in a plain paper wrapper.	The Vendor was cautioned by the Town Clerk by order of the Health Committee.

Canal Boats Acts, 1877--1884.

I beg to report that I am employed as River Bailiff and Dues Collector for the Trustees of the Ouse Navigation. The whole of my time is employed upon the works in connection with the Navigation.

I receive a salary of Ten Pounds per year as Inspector of Canal Boats.

During the year ending December 31st, 1903, I have inspected 241 Boats. Upon three boats the cabins have been re-painted. Seven boats were not registered under the Acts, being new boats they have since been registered under your Authority. Two boats having lost the original certificates, new ones have been granted.

Upon the 241 boats I found 446 men, 40 women, and 48 children.

The highest number of boats upon the Register was 219. Out of this number 38 have been broken up, 16 registered with other authorities, and 8 withdrawn, leaving 157 upon the Register.

I have not met with any cases of illness upon any of the boats.

The only case of sickness reported was Edward Close, of Hull, who had Typhoid Fever after being to York, and blamed the drinking water. I explained to the Hull Authorities that the Foss Navigation Committee had the town's water laid to the Castle Mills Landing for the boatmen to fill their casks free of charge. I think in this case the water had been taken from the river, it being too much trouble to carry the water from the Landing on to the boat.

The Government Inspector, Mr. Owen J. Llewellyn, visited York on December 19th, and examined the books.

I remain, Gentlemen,

Your obedient Servant,

THOS. LEETHAM, Inspector.

1903. METEOROLOGICAL STATION, YORK.—THE MUSEUM

Longitude 1° 5' W., Latitude 53° 57' N. Height above Mean Sea Level, 56 feet. Gravity correction, + .024 ins.

1903.	Mean Pressure at 32° Fahrenheit at M.S.Level	Air Temperature.										Humidity.			Barometer.		Sunshine.			
		9 a.m.	9 p.m.	Mean.	Means of		Absolute Min. and Max.				Percentage.			Highest Barometer.	Lowest Barometer.	Total Hours.	Percentages.			
					Min.	Max.	Min.	Day.	Max.	Day.	9 a.m.	9 p.m.	Mean.							
																		°	°	°
	ins.	°	°	°	°	°	°	°	°	°	°	%	%	%						
Jan.	29.892	38.7	39.0	38.9	35.2	43.6	19.0	14th	55.0	26th	91	90	91	30.665	14th, 9 a.m.	28.975	7th, 9 a.m.	32.5	13	13
Feb.	.974	43.6	44.5	44.1	40.0	50.1	32.0	1, 2	57.0	8, 19	87	87	87	.562	16th, 9 p.m.	29.017	27th, 9 a.m.	37.3	14	22
Mar.	.715	43.8	43.7	43.8	39.7	51.7	33.0	11th	65.0	25th	81	85	83	.286	8th, 9 p.m.	28.595	2nd, 9 p.m.	91.0	25	22
Apr.	.852	44.4	42.2	43.3	36.7	50.5	28.0	23rd	60.0	10th	77	83	80	.407	17th, 9 p.m.	29.336	29th, 9 a.m.	138.5	33	42
May	29.895	52.0	48.9	50.5	43.7	58.9	32.0	12th	77.0	31st	79	86	83	.486	23rd, 9 p.m.	.239	4th, 9 p.m.	135.8	28	30
June	30.082	57.2	53.6	55.4	47.4	63.8	36.0	21st	77.0	27th	76	83	80	.462	6th, 9 a.m.	.699	16th, 9 a.m.	174.7	35	35
July	29.884	60.6	57.7	59.2	52.2	67.4	41.0	8th	80.0	9, 10	78	85	82	.297	9th, 9 p.m.	29.518	17th, 9 a.m.	142.3	28	32
Aug.	29.773	58.4	56.6	57.5	50.6	65.2	44.0	23, 24	70.0	8, 9	82	84	83	.152	7th, 9 a.m.	28.973	15th, 9 a.m.	147.7	33	30
Sept.	30.008	55.4	52.8	54.1	47.7	62.7	35.0	13th	73.0	1st	86	93	90	.550	15th, 9 a.m.	29.043	10th, 9 p.m.	136.3	36	35
Oct.	29.540	50.0	49.5	49.8	44.6	55.9	36.0	24th	65.0	1st	91	95	93	.074	18th, 9 p.m.	28.900	12th, 9 p.m.	60.6	19	18
Nov	.994	42.3	42.3	42.3	38.0	48.7	27.0	7, 30	55.0	3, 24	91	91	91	.629	5th, 9 a.m.	29.085	28th, 9 a.m.	54.1	22	17
Dec.	29.751	37.2	38.1	37.7	34.3	41.8	23.0	2nd	50.0	22nd	94	94	94	30.281	28th, 9 a.m.	29.045	10th, 9 a.m.	11.7	5	7
Year	29.863	48.6	47.4	48.0	42.5	55.0	—	—	—	—	84.4	88.0	86.2	30.665	Jan. 14th, 9 a.m.	28.595	Dec. 2nd, 9 p.m.	1162.5	26	28

Heights above Ground :—Barometer, 3 feet ; Thermometers, 4 feet ; Rain-gauge, 1 foot.

1903	Rainfall.		Weather, No. of Days of								Wind, No. of Observations of									
	Total.	Max.	Day.	Rain.	Snow.	Hail.	Thunder Storm.	Clear Sky.	Over-cast.	Gale.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	
	ins.	ins.																		
Jan.	1·71	·30	5th	20	4	0	0	2	13	0	7	2	4	7	14	15	12	0	1	
Feb.	1·18	·40	21st	14	3	0	0	0	11	3	4	0	1	0	14	15	19	3	0	
Mar.	2·45	·76	17th	13	2	1	1	3	7	0	3	0	1	0	26	14	15	3	0	
April	1·31	·24	27th	15	1	2	1	1	7	0	18	3	9	2	3	4	12	9	0	
May	4·02	·96	9th	15	0	1	2	5	12	0	11	11	9	4	11	7	5	4	0	
June	1·88	·60	13th	11	0	0	1	3	10	0	22	10	7	2	10	0	6	2	1	
July	3·16	·66	11th	18	0	0	1	2	11	1	9	0	1	3	10	4	26	9	0	
Aug.	2·02	·48	17th	17	0	0	1	3	9	0	4	1	3	3	11	11	25	3	1	
Sept.	3·37	1·07	10th	19	0	0	1	7	8	0	8	1	10	5	15	7	8	6	0	
Oct.	6·95	1·30	8th	30	0	0	2	2	13	1	2	0	2		25	13	12	4	0	
Nov.	1·41	·25	2nd	17	0	0	0	8	8	0	11	0	0	0	13	3	21	11	1	
Dec.	0·85	·20	7th	18	1	0	0	2	16	0	6	2	11	8	26	7	1	1	0	
Year.	30·31	—	—	207	11	4	10	38	125	5	105	30	58	38	178	100	162	55	4	

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